

DELHI



NATIONAL CAPITAL
TERRITORY OF DELHI

Eighth Five Year Plan

1992-97

and

Annual Plan

1992-93

VOLUME-II

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**PLANNING DEPARTMENT
GOVT. OF NATIONAL CAPITAL
TERRITORY OF DELHI**

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NATIONAL CAPITAL TERRITORY OF DELHI

Part-I Volume-I

EIGHTH FIVE YEAR PLAN 1992-97 AND ANNUAL PLAN 1992-93

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CAPITAL'S PROSPECTIVE EIGHTH FIVE YEAR PLAN

INTRODUCTION

GEOGRAPHICAL AREA AND POPULATION

Delhi is spread over an area of 1483 sq. kms. Its maximum length is around 33 miles and the maximum width is 30 miles. Out of the total area of 1483 sq. kms., 797 sq. kms. is rural and 686 sq. kms. is urban. There are three local bodies viz. Municipal Corporation of Delhi, New Delhi Municipal Committee and Delhi Cantonment Board whose respective area is 1397.3 sq. kms., 42.7 sq. kms. and 43 sq. kms. The entire rural area falls within the jurisdiction of Municipal Corporation of Delhi. For development purposes, the rural area is divided into 5 community development blocks, namely Alipur, Kanjhawala (Nangloi), Najafgarh, Mehrauli and Shahdara. There are 369 villages in Delhi of which 258 villages are still having their rural character while 111 villages have been largely urbanised. According to the 1991 Census urban area accounted for 90% population whereas only 10% population lived in rural areas. The distinction between the rural and the urban areas of Delhi is gradually diminishing. In next 10 years or so, the present negligible 10% rural population is likely to get merged in the urban extension and the city as a whole will get transformed into a highly urbanised growth centre.

The geographical area of the U.T. of Delhi has remained the same in the last four decades. But Delhi's population has been rising steadily. An important point of concern is that the population has increased by almost 53% in every decade since 1951. Delhi in 1951 was a major town with only 17 lacs of people. Delhi in 1961 came to have 27 lacs of people. In 1971 this figure increased to about 41 lacs and in 1981 it rose to 62 lacs. As per 1991 Census Delhi is having 94 lacs as its population figure. By 2001 Delhi's population will reach the figure of 132 lacs and by 1997, it will be 115 lacs.

Inward migration has now become a part of Delhi's very existence. But this phenomenon has also become a major constraint in Delhi's development efforts. All concerned agree that the implementation of the NCR Plan will go a long way to retain Delhi as a city of modern opportunities and experiences. People may be alarmed but the current rate of population increase in Delhi will take up to a figure of 132 lacs by 2001. The main reasons for migration to Delhi are commonly attributed to Delhi's employment potential, better state of civic amenities, educational and health facilities, long term prospects in the areas of profession, trade and commerce, highly developed industrial infrastructure etc. There is absolutely no doubt that if the present trend of migration continues unabated, our civic

amenities will have to undergo severe strain. Similarly, our public utility services will be put to severe test leading to break-down under acute circumstantial problems. From all angles, therefore, the immediate implementation of the NCR Plan is a necessity.

Delhi's increased population cannot be termed as a natural population growth. Our birth rate per thousand of population was 33.10 in 1951 and it has now come down to 29.08. But we will not be surprised if our marginal success in this area gets neutralised soon because on the one hand we are having constant inflow of people from outside and on the other hand, there is a strong desire on the part of the outside population to settle down in Delhi on permanent basis. However, while discussing this point here, we should not also over-look the fact that even Delhi's present growth rate of population is virtually double of the country as a whole.

Talking of migration again, it has been estimated that the influx from U.P. is the highest (42%) followed by Bihar (10%), Haryana (8%), Punjab (7%), Rajasthan (5%), Kerala (4%), Maharashtra (3%) and Tamilnadu (3%). Out of the total immigrant as many as 46% come from rural areas and 54% from urban areas. SC population amongst the immigrants is estimated to be 9%.

As per 1991 Census, density of population in Delhi is 6319 persons per sq. km. which is the highest in the Country. The average density of population at national level is only 267 persons per sq. km. The density of population in Delhi has increased from 1165 persons per sq. km. in 1951 to 6319 persons in 1991.

Delhi's literacy rate is as high as 76.09% as against the all India average of 42.89%. The female literacy rate is also about two times more (68%) as against the national average (32%). The birth rate and death rates have also been brought down to a great extent. Our birth rate which was 33.10 per thousand in 1951 has come down to 28.32 per thousand in 1989. Similarly, the death rate which was 9 per thousand in 1951 has come down to 6.77 per thousand in 1989. Infant mortality rate which was 84 per thousand live birth in 1951 has also come down to 40 per thousand. This has been achieved with the concerted efforts made by the Administration towards the expansion of medical facilities and to create awareness about family welfare programmes in the Union Territory of Delhi.

Despite the fundamental constraint of population influx, we have so far been able to make substantial changes in various sectors of development by making suitable land use changes, expansion of trade and small scale industries, enlargement in our transport and communication network, improvement and expansion of our health care institutions, setting up of various educational and technical institutions, creating awareness for better environment etc.

In order to provide these basic necessities in an orderly and balanced manner, we have been keeping our activities on broad requirements of the Master Plan of Delhi which is basically a document broadly indicating the organised development course proposed for Delhi in different sectors. There has also been a change in NCR Planning and accordingly priority towns are being developed in neighbouring States of Haryana, Rajasthan and U.P. to check migration from these States.

From all indications, it is now clear that the Capital's future life and the success and failure of the development schemes will, to a large extent, depend on our will and effectiveness to tackle the important factor of migration. However, knowing fully well that we have got to live with this fundamental constraint and the fruit of the success of implementation of the NCR Plan will make any dent in Delhi's life pattern only after 10 to 15 years, our strategy for the development of Delhi has to be based on improving the living conditions of Delhi's population in all vital areas of social and economic life with all the given constraints. We have, therefore, been constantly updating our requirements in vital sectors and in all our plan schemes, we are taking into consideration the future realities. We believe that our balanced efforts in vital areas like Energy, Water Supply & Sewerage Treatment, Rural Sanitation, Health, Education, Transport, Industries, Development of Weaker Sections, Housing etc. to meet Delhi's future needs will have to be on essentially pragmatic lines. Our approach to the Eighth Five Year Plan shall necessarily have to be in tune with our realistic needs in these development sectors during the next five years or even 10 to 15 years in terms of long term perspective.

ECONOMY

Delhi's economic situation is improving with much higher annual average increase as compared to the increase in the overall national economy. Delhi's net state domestic product at current prices which was Rs. 2326 crore in 1980-81 has increased to Rs. 8602 crore in 1989-90 showing an annual average growth rate of 15.64% during the last nine years. At constant prices the net state domestic product which was Rs. 2326 crore in 1980-81 has increased to Rs. 4344 crore in 1989-90 showing an annual average growth rate of 7.19% during the last nine years.

The relative share of the Primary Sector comprising of Agriculture and Animal Husbandry, Forestry & Fishing and Mining & Quarrying in the NSDP has gone down from 5.24% in 1980-81 to 4.50% in 1989-90. The relative share of the Secondary Sector comprising of Manufacturing, Construction, Electricity, Gas & Water Supply in the net state domestic product has increased from 28.71% in 1980-81 to 29.94% in 1989-90. The relative contribution of the Tertiary Sector comprising of Transport, Storage & Communication, Trade, Hotels & Restaurants, Banking & Insurance, Real Estate, Public Administration and other services has marginally decreased from 66.05% in 1980-81 to 65.56% in 1989-90. The changes, pointed out above in the sectoral composition of the NSDP over the years are due to various reasons. The main among them are the urbanisation of the territory and consequential reduction of area under agriculture and allied industries on the one hand and substantial increase in the other activities like Trade & Commerce, Hotels, Transport, Communication & Storage, Banking & Insurance, Public Administration etc. on the other hand.

It is also pertinent to note that the contribution of U.T. of Delhi to the National Income has marginally been increased from 2.1 per cent during 1980-81 to 2.4 per cent during 1989-90 as against 1 per cent share of Delhi's population in the all India population. With the Master Plan restricting the growth of large scale industries, the 'Economy Gap' has been filled by tremendous progress in the development of small scale industries including handloom and handicrafts and Delhi has emerged as one of the largest small scale industrial centres in the country. At present, Delhi has 85,000 industrial units in which more than 7.65 lacs persons are getting employment. The present investment in these units is around Rs. 1600 crore.

The per capita plan expenditure in Delhi has been increasing progressively over the years. In the Sixth Plan average per capita plan expenditure for Delhi was Rs. 308 per year as against the national average of about Rs. 141 per year. Similarly, in the Seventh Five Year Plan (1985-90), the average per capita plan expenditure for Delhi (Rs. 657) was also highest as compared to the National average (Rs. 234). In 1991-92, the average per capita plan expenditure has gone upto Rs. 958 as against the National average of about Rs. 338 per capita. Thus in Delhi, the per capita plan expenditure is nearly three time higher than the National per capita plan expenditure. The high level of investment in plan development of Delhi has led to generation of higher income in addition to the general prosperity of the citizens. With the boost in our economy, our per capita income has also gone up. The per capita income which was Rs. 3838 in 1980-81 has gone upto Rs. 9709 in 1989-90 showing an average annual growth rate of 10.86% at current prices. This is nearly more than two times the National per capita income (Rs. 4291).

Thus the Union Territory exhibits a classical feature of a rapidly urbanising and modernising economy. The population explosion, declining importance of the Agriculture sector and pressure on civic amenities are points of the emerging scenario.

The highest ever plan expenditure in the past years has gone a long way towards securing all round progress of Delhi. It really helped in providing adequate civic services and amenities and improving the quality of life, particularly in slum, khatras, urban and rural villages, re-settlement colonies, JJ clusters and regularised unauthorised colonies.

PLANNING IN THE PAST

Planning era in Delhi started with the launching of the First Five Year Plan in 1951. The launching of the First Five Year Plan initiated a process of development aimed not only at raising the standard of living of people but also opening out to them new opportunities for a richer and more varied life. We have come a long way over the past forty years. Delhi's planning process undoubtedly has taken care of a number of Capital's problem areas. Delhi's developmental efforts in the past have considerably strengthened Delhi's overall economic and social infrastructure. Income and consumption levels have significantly risen. Consumption basket has been diversified. The average life expectancy has gone up. The death and birth rates have declined. Literacy has improved and the educational base has been widened. The investment trend since the First Five Year Plan has been as under :—

Plan	Period	Outlay	(Rs. in crore)	
			Expenditure	%age
First Five Year Plan	1951-56	6.30	4.70	75
Second Five Year Plan	1956-61	17.00	15.37	90
Third Five Year Plan	1961-66	99.33	93.10	94
Annual Plan	1966-67	24.10	22.37	93
Annual Plan	1967-68	27.50	22.40	82
Annual Plan	1968-69	23.40	22.55	96

Fourth Five Year Plan	1969-74	168.77	155.10	92
Fifth Five Year Plan	1974-79	363.75	341.34	94
Annual Plan	1979-80	108.00	107.16	99
Sixth Five Year Plan	1980-85	1042.00	1042.07	100
Seventh Five Year Plan	1985-90	2644.34	2631.47	99
Annual Plan	1990-91	750.00	742.80	99
Annual Plan	1991-92	839.00	819.15	97.63
Annual Plan	1992-93	920.00	398.81	43.35
				(upto Sept., 92)

ACHIEVEMENTS OF THE 7TH FIVE YEAR PLAN (1985-90)

The Planning Commission had initially approved an outlay of Rs. 2000 crores for the Union Territory of Delhi for the Seventh Five Year Plan. However, while finalising the operative Annual Plans, the Planning Commission had raised final allocations for the Seventh Five Year Plan substantially, keeping in view the developmental needs of Delhi in general and core sectors in particular like energy, water supply and transport. In specific terms, against the initial overall allocations of Rs. 2000 crores, Delhi's final allocations for the Seventh Five Year Plan stood at Rs. 2644.34 crores. Against this an expenditure of Rs. 2631.47 crores has been incurred.

In the Seventh Five Year Plan, we have invested more than 90% of the total plan outlay under the following sectors in order to provide basic civic amenities, services and for improving the quality of life of people particularly in katras, slums, jhuggi jhompri, resettlement colonies, regularised/unauthorised colonies, jhuggi clusters, urban and rural villages :—

(Rs. in crores)			
S. No.	Name of the Sector	Amount invested	% investment of total expenditure
1	2	3	4
1.	Energy	838.87	32
2.	Housing & Urban Development	433.64	16
3.	Transport	363.69	14
4.	Water Supply	326.62	12
5.	Education	223.69	8
6.	Medical & Public Health	207.20	8

On the physical front some of the major achievements made under various sectors of development during the Seventh Five Year Plan are as under :—

1. Energy

6 Gas Turbines of 30 MW each were installed at I.P. Estate at a cost of Rs. 211.50 crores to increase the generation capacity of DESU by 180 MW.

The work for the modification of fuel, oil system on existing 6 Gas Turbines was completed. Now, all these Gas Turbines are using natural Gas as fuel in place of high speed diesel/Neptha.

Replacement work of two Thermal Units of 67.5 MW each at Rajghat was taken up to increase DESU's own generation capacity by 135 MW at a cost of Rs. 237.77 crores. The first unit was commissioned in 1986-87 and started generation of electricity since January, 1990. The second unit was synchronised on 1st April, 1990 and started generation in 1990-91.

The work on 400 KV line around U. T. was taken up in hand so as to receive the bulk power supply from Northern Grid and National Capital Region Power Projects being set up by the Government of India.

Transmission and distribution capacity was increased by DESU during Seventh Plan period as under :—

220 KV Lines	1300 MVA
66 KV Lines	995 MVA
33 KV Lines	502 MVA
11 KV & LV Lines	1000 MVA

For smooth and free flow of electricity, 3 new sub-stations of 220 KV were constructed at IP Station, Okhla and Burari. The work on the Patparganj—Narela 220 KV double circuit tower line was also started. 12 new sub-stations of 66 KV were constructed at Dilshad Garden, Palam, Okhla, Badli, Rohini-II, Bodela and Vasant Kunj etc. 10 new sub-stations of 33 KV were also constructed at Jama Masjid, Burari, Kailash Nagar, Malviya Nagar etc.

To improve the voltage profile during summer seasons, DESU has installed 160 MVA shunt capacitor.

3.56 lac new consumer connections were sanctioned during the Seventh Plan period. 4782 tube-wells were also energised.

Under Integrated urban Energy Programme, DEDA has installed 571 solar water heating system and sold 12384 solar cookers and 26500 wooden stoves to the public at subsidised rates during Seventh Plan period.

TRANSPORT

Flyover at Zakhira at a cost of Rs. 18.54 crores and road under bridge at Shakti Nagar at a cost of Rs. 5.89 crores were constructed.

4 lane portion of the prestigious bridge across Yamuna River at ISBT was completed and opened for traffic in May, 1990.

The work for the widening of Lothian Bridge was & taken up at a cost of Rs. 18 crores. 3 spans of the bridge were completed and opened for traffic.

The work for the construction of road over bridge 22 on outer Ring Road at the crossing of Delhi-Mathura Railway Line near Okhla was started at a cost of Rs. 17.30 crores.

The work for the construction of a bridge over S. S. light railway line on G.T. Road near Shahdara Chowk was started at the cost of Rs. 19.36 crores and work remained in progress.

Preliminary work relating to the construction of flyovers at Raja Garden, Safdarjung, Punjabi Bagh crossing and parallel bridge at ITO was initiated.

The work relating to widening of Master Plan Road No. 56 from two lanes to four lanes and G. T. Road bye pass No. 24 in Trans-Yamuna area were completed.

Action was also initiated to construct another ISBT at Sarai Kale Khan near Nizammuddin for which about 25 acres of land was taken over from D.D.A. and the work relating to the levelling of ground and boundary wall was started.

Construction work of Inspection Pit for the vehicles at Burari village started.

Mass Education campaigns were started for prevention of vehicles excess exhaust to take care of air pollution problems.

Rail India Techno Economic Services was assigned a study for introduction of Mass Rapid Transport System in Delhi.

Pedestrian sub-ways were also constructed at a number of places such as Baba Kharak Singh Marg, Ashoka Road, INA Market, Connaught Place, Sansad marg and Jaipath etc.

WATER SUPPLY & SEWERAGE

Water supply capacity was increased from 344 MGD at the end of Sixth Plan to 437 MGD by the end of March, 1990.

20 MGD portion of 40 MGD new Wazirabad Water Treatment Plant was commissioned during February, 1990.

Out of 543 unauthorised/regularised colonies, water supply was provided to 491 colonies till March, 1990. 12 tube-wells, 456 deep bore hand pumps and 255 new public hydrants were installed in these localities.

The sewerage treatment capacity which was 152 MGD at the end of 6th Plan was increased to 216 MGD by the end of Seventh Five Year Plan.

The work on the sewerage treatment plants at Okhla, Keshopur, Coronation Pillar, Basant Kunj and Kondli was accelerated.

Under Rural Sanitation Programme, more than 6000 sulabh shauchalayas were constructed by Flood Control Department in the houses of SC families living in rural areas.

MEDICAL AND PUBLIC HEALTH

100 bedded hospital at Mangolpuri started functioning, 100 bedded hospital at Zafarpur started functioning with OPD services.

The work for construction of two 100 bedded hospitals at Khichripur and Jahangipuri remained in progress.

GTB Hospital-cum-Medical College at Shahdara started functioning with its 500 bed capacity. A number of new clinics and lab. facilities were introduced in the hospital.

Building for the 500 bedded DDU Hospital at Hari Nagar was constructed. 368 staff quarters were constructed for the employees of the hospital.

C. T. Scan facilities were introduced in the LNJP Hospital to take care of accident and Trauma cases.

EDUCATION

The Directorate of Education opened 314 new schools by way of opening, bifurcation and upgradation.

144 new primary schools were also started by the MCD.

5 primary schools were also opened by NDMC in its area.

4 new colleges for Physical Education, Business Studies, Art and Commerce & Applied Sciences for women were started by the Administration.

State Council of Education Research and Training was set up as a separate autonomous institution.

TECHNICAL EDUCATION

Two new polytechnics one each for boys and girls were started in Hi-tech. and emerging areas.

The intake capacity in the existing polytechnics was augmented from 2176 to 2717 students (an increase of 25%).

New courses in emerging technologies in Hi-tech. areas like computer, digital, medical, electronics and instrumentation and control were introduced (5 new diploma-courses were introduced).

Upgradation in the quality of training and diploma level institution was achieved through modernisation of workshops and removal of obsolescence, training of teachers, entrepreneurship development and stepping up interaction between industry and institution.

The intake capacity at Under-Graduate level in the Delhi College of Engineering was increased from 280 to 320 students (7% increase) in the last two years, while in Delhi Institute of Technology from 90 to 135 students (50% increase).

B.E. courses in Computer Engineering, Production and Industrial Engineering in Delhi College of Engineering and Instrumentation and Control in Delhi Institute of Technology were introduced.

Part-time Degree Courses for in-service diploma holders were re-started after a gap of 7 years as a part of continuing education programme with an intake of 60 students.

The Delhi Institute of Technology, established in the last year of Sixth Plan, was strengthened and consolidated. To decide about the future expansion, profile of growth for the institute was prepared. Efforts also continued to develop an independent spacious campus for the institute for which land measuring 150 acres was taken over at Papan Kalan.

INDUSTRIES

The complex of 7 flatted factories at Rani Jhansi Road was completed and started functioning.

500 plots were developed and allotted to the public in the industrial estate at Patparganj.

103 industrial sheds under self financing schemes were constructed by DSIDC at Rohtak Road Industrial area.

1535 plots were developed in the Narela Industrial Complex by DSIDC.

30 work sheds and 120 dwelling units were constructed for handloom workers at Bunkar Vihar, Nand Nagri.

2919 Industrial Work Centres were constructed by DDA (Slum) in various resettlement colonies for the weaker sections of the society.

Society for Self-employment established and started training in the field of Radio and TV repairs, household electric appliances refrigeration and air conditioning, plumbing, garment fabrication etc. to unemployed youths to enable them to set up their own trade/business.

For setting up of High-Tech. vocational training centre, a memorandum was signed by the Government of India with the Government of Italy.

Two work-sheds at Weavers Colony at Nand Nagri were constructed.

14 Dye Houses and Canteen Block were also constructed at Bharat Nagar, Weavers Colony.

HOUSING

The capital base of Delhi Cooperative Housing Finance Society was strengthened by providing a share capital of Rs. 12.62 crores. The society sanctioned loan amounting to Rs. 184.56 crores to 332 Group Housing Societies for the construction of more than 29,000 dwelling units.

12 Night Shelters were constructed and work on the 2 more Night Shelters buildings remained in progress. About 684 staff quarters were constructed by PWD for Delhi Administration employees and construction work of about 225 staff quarters remained in progress. 42 acres of land was also purchased by PWD near Dhirpur village for the construction of staff quarters for Delhi Administration employees.

1396 staff quarters were constructed for Delhi Police employees.

Building for 12 Police Stations and Police Posts were constructed. 60 acres of land was purchased for housing the PCR lines Communication Unit and Delhi Armed Police Battalion.

638 staff quarters were constructed for the employees of NDMC.

More than 400 staff quarters were also constructed by the MCD for its employees and work remained in progress on 2312 staff quarters.

About 9576 house sites were developed for landless persons and 2213 persons were given construction assistance to construct their houses on the plots allotted to them.

URBAN DEVELOPMENT

Under the scheme, Environmental Improvement in slum areas, 6.13 lacs slum dwellers were benefitted by providing 48 community halls, 12 akharas, 3 open air theatres and 8 social centres alongwith other basic facilities.

Under the scheme, Environmental Improvement in JJ Clusters, 10 lacs jhugg dwellers were covered by provision of 121 jan suvidha complexes containing 5882 WC seats and 2458 baths. 6313 street light points were provided in 326 jhuggi clusters 1400 water hydrants and 507 India Mark-II hand pumps were installed in different clusters.

Under the scheme 'Structural improvement in slum kattras', 71,000 katra dwellers were benefitted by the repair of 950 properties/kattras.

Work for providing basic civic amenities viz. road, storm water drains, street lighting, public toilets, water supply etc. remained in progress, in various resettlement colonies, rural and urban villages and regularised/unauthorised colonies.

Urban Basic Services Programmes were launched for community participation in the process of environmental improvement in JJ Clusters.

WELFARE OF SC/ST

45650 SC families were provided financial assistance under various income-generating programmes.

Some of the important schemes being implemented for economic development of SCs are :—

- (i) Under the scheme 'Financial Assistance to SC entrepreneurs', loans are provided to registered units upto Rs. 5,000/- for setting up/expansion of industries and subsidy is also given for the purchase of machinery/equipment to be purchased of Rs. 5,000/- whichever is less.
- (ii) Financial assistance is being provided by DSCFDC to SCs in collaboration with the National Banks for schemes costing upto Rs. 12,000. The Ministry of Welfare, Government of India has agreed to the request of the Corporation to permit it to advance 25% as subsidy apart from 25% margin money to the beneficiaries. The element of 25% subsidy would, of course, be an out-right non-refundable grant which will help the beneficiaries who belong to very low income group. The remaining 50% of the loan will continue to be arranged through financial institutions.
- (iii) For the construction of houses in rural and urban areas, subsidy amounting to Rs. 4500 is provided to SCs.
- (iv) An amount of Rs. 500/- in the form of cash or kind is provided to settle themselves in self-employed trade.

SOCIAL WELFARE AND NUTRITION

The number of ICDS Projects which was 19 by the end of 6th Five Year Plan was raised to 26. These projects are covering about 26 lacs population and providing various service like health check-up, immunisation, supplementary nutrition, referral services, pre-school education, adult education to women, hygienic and health education, training in house-hold occupation and handicrafts etc. in rural, urban and slum areas and resettlement colonies where weaker sections of the society are inhabited,

AGRICULTURE AND ALLIED SERVICES

The strategy adopted for this sector is to use intensive cultivation methods for more production and remunerative use of the limited agricultural land which includes irrigation throughout the year, better supply of inputs that is seeds, fertilisers, sludge, adequate plant protection measures, soil testing facilities, use of modern tools and equipments in the cultivation process etc.

The farmers education programme was expanded so as to adopt the correct cropping pattern in the area of food crops and vegetables. With a ready market for agricultural and horticultural products available in the metropolitan city, emphasis is being laid on bringing more area under vegetable production which is more remunerative than food crops in this Territory.

The project for the creation of "Bird-cum-Wild Life Sanctuary" at Asola village, Delhi at a cost of Rs. 2.93 crores was got approved from the Government of India, Ministry of Environment, Forest and Wild Life. Work on the project was accelerated.

A Horticultural Training Centre was set up in Moti Bagh for the training of Gardeners.

215 lacs trees were planted by Delhi Administration and its allied agencies.

The project for modernisation of existing slaughter house at Idgah Road with the Hungarian assistance at a cost of Rs. 40 crores was got approved from the Ministry of Agriculture, Government of India. The capacity of this slaughter house will be increased from 3000 to 10,000 sheeps/goats/buffaloes per shift of 8 hours.

RURAL DEVELOPMENT

For the promotion of social and cultural activities in rural villages, 18 panchyat ghars, 46 chaupals and 65 village walls were constructed for Scs.

DEDA is propagating non-conventional sources of energy in rural areas of Delhi under which 418 bio-gas, 3672 solar cookers and 67 wind mills were installed. 8 Energy Parks were set up in all the 5 development blocks, where demonstration is being given about making use of solar energy as a substitute of traditional fuel to draw water for irrigation purposes.

Functional Training Centre for Integrated Rural Energy Programme at Bakoli was constructed where officer from all over India are coming for training.

IRRIGATION AND FLOOD CONTROL

Irrigation facilities were increased with the installation of 880 tubewells and by providing treated effluent to farmers through 3 sewerage treatment plants at Keshopur, Okhla and Coronation Pillar.

Work relating to supplementary drain for 5000 cusecs discharge passing through the area of Nangloi, Mangolpuri, Rohini and Samaipur Badly was taken up at a cost of Rs. 63.79 crores.

Massive desilting work of all the 5 trunk drains of trans-Yamuna area was undertaken before the onset of 1989 monsoon in order to prevent the recurrence of Gastro Enteritis epidemic as had happened in the year 1988.

SCIENCE, TECHNOLOGY AND ENVIRONMENT

Delhi Administration had taken steps to curb the menace of air pollution caused by vehicular exhaust. Free testing facility for checking of pollution of two wheelers and motor cars is being provided at all offices of Dte. of Transport. Similarly, mobile teams are also covering various points for providing free checking facility.

LABOUR WELFARE

The total seating capacity in the industrial training institutes was increased from 6692 to 7636.

For Rural areas ITI Narela and Jaffarpur opened as guest institutions at Kingsway Camp and Tilak Nagar, pending the construction of their own buildings.

A new ITI for women at Gokhale Road offering trades like electronics, textile designing, commercial art was opened from 1990-91.

Informal Training Programmes by way of short duration courses in service trades like motor winding, house wiring T.V. machanic etc. were introduced.

New skills and trades having high potential for self employment were introduced to meet the present and future needs of the Union Territory of Delhi in areas, such as, electronics, draftsman civil, plastic processing operator, computer courses etc.

EIGHTH FIVE YEAR PLAN 1992-97 APPROACH, NEEDS AND PROJECTIONS

The approach to the Eighth Plan in the National perspective, will have the following fourfold focus :—

- (i) Clear prioritisation of sectors/projects for investment in order to facilitate operationalisation and implementation of the policy initiative taken in the areas of fiscal, trade and industrial sectors and human development;
- (ii) Making resources for these priority sectors available and ensuring their effective utilisation; and completion of projects on schedule avoiding cost and time over runs;
- (iii) Creation of a social security net through employment generation, improved health care and provision of extensive education facilities throughout the country; and
- (iv) Creation of appropriate organisations and delivery systems to ensure the benefits of investment in the social sectors reach the intended beneficiaries.

Based on this approach, the following objectives will be accorded priority :

- (i) Generation of adequate employment to achieve near full employment level by the turn of the century;
- (ii) Containment of population growth through active people's cooperation and an effective scheme of incentives and disincentives;
- (iii) Universalisation of elementary education and complete eradication of illiteracy among the people in the age group of 15 to 35 years;

- (iv) **Provision of safe drinking water and primary health care facilities, including immunisation, accessible to all the villages and the entire population, and complete elimination of scavenging;**
- (v) **Growth and diversification of agriculture to achieve self-sufficiency in food and generate surpluses for exports;**
- (vi) **Strengthening the infrastructure (energy, transport, communication, irrigation) in order to support the growth process on a sustainable basis.**

In tune with the overall approach in the National perspective, Delhi's Eighth Five Year Plan will progressively be needing a realistic, long sustaining and growth oriented approach to cope up with the pressing realities of the Capital. Delhi's Seventh Plan has undoubtedly taken care of a number of Capital's problem areas. But the fast changing scenario of Delhi on the population front alone has also been instrumental in eroding many gains of our development efforts. Delhi Administration is conscious of the facts that a pragmatic plan formulation is essentially a step forward to ultimate plan success and that the consolidation of realised plan efforts should receive as much tender attention as the initiation of new plan schemes.

The basic endeavour is to develop the core sectors through allocation and optimum utilisation of funds. In fact, the broad strategy of Delhi's Eighth Five Year Plan is based on the following guiding factors :—

- (1) Consolidation of existing infrastructure created in the preceding plans. The first priority is on funding the spill-over projects and schemes of the 7th Five Year Plan so that benefits start accruing to the target group.
- (2) In the allocation of funds in the 8th Five Year Plan under different sectors, preference and priority has been assigned to development sectors covering civic and public utility services, such as, Power, Water Supply & Sanitation, Transport, Health Care, Rural and Urban Development.
- (3) A number of important programmes have been included for socio-economic development of weaker sections, women, children and youths under various sectors of development.
- (4) The requirement for roads, schools, hospitals, electricity, water supply, sewerage and drainage networks for growing population has been adequately assessed and corresponding financial outlays have been provided in 8th Five Year Plan.

In conformity with the needs and priorities of the National Capital, highest allocation has been made for the Energy Sector (Rs. 1220 crore), followed by Water Supply & Sewerage (Rs. 820 crore), Transport (Rs. 660 crore), Education including Technical Education (Rs. 550 crore), Urban Development (Rs. 400 crore), Medical and Public Health (Rs. 350 crore) and Housing (Rs. 100 crore).

FINANCIAL OUTLAYS FOR 8TH FIVE YEAR PLAN AND ITS BREAK-UP BETWEEN DELHI ADMINISTRATION AND OTHER IMPLEMENTING AGENCIES.

The Planning Commission has approved an outlay of Rs. 4500 crore for the National Capital Territory of Delhi's Eighth Five Year Plan 1992-97. The distribution of approved outlay between Delhi Administration and other implementing agencies is as under :—

S. No.	Agency	7th Plan Expenditure	(Rs. in crore)	
			Approved 8th Plan 1992-97	outlay Annual Plan 1992-93
1.	Delhi Admn.	728.17	1312.31	265.50
2.	M.C.D. (General Wing)	522.01	1039.37	223.82
3.	N.D.M.C.	136.53	131.10	28.57
4.	M.C.D. (Slum Wing)	101.87	59.97	12.06
5.	D.D.A.	20.28	0.25	0.05
6.	D.W.S. & S.D.U.	294.65	785.00	125.00
7.	D.E.S.U.	797.96	1172.00	265.00
Total		2631.47	4500.00	920.00

ANNUAL PLAN 1990-91

For the Annual Plan 1990-91, the Planning Commission had approved an outlay of Rs. 800 crore. However, in view of the economy measures, the GOI has reduced this allocation to Rs. 750 crore in the revised estimates. Against the revised outlay of Rs. 750 crore, an expenditure of Rs. 742.80 crore was incurred by the Plan Implementing Depts/Agencies which works out to 99.04% of the Plan allocation.

ANNUAL PLAN 1991-92

The approved outlay of Rs. 920 crore for 1991-92 was reduced to Rs. 839 crore in the revised estimate by the GOI in view of economy measures out of which a sum of Rs. 14.34 crore was re-appropriated to non-plan with the approval of the Competent Authority to accommodate MCD's requirements for ways and means assistance as well as grant-in-aid for education. The balance amount of Rs. 824 crore was placed at the disposal of various Plan Implementing Departments, against which they have reported an expenditure of Rs. 819.15 crore which works out to 99.33% of the Plan allocation.

SECTORAL HIGHLIGHTS

Energy

The maximum demand of power in Delhi has already crossed 1500 MW. Current studies show that by the end of 8th Five Year Plan, the demand for Power in Delhi will cross 2500 MW. The situation of energy supply is a cause of concern because the present power sources located in Delhi are not adequate to meet full requirements and DESU has to depend on other sources outside Delhi.

This requirement is proposed to be met by timely implementation of the Waste Heat Recovery Project, Dadri Thermal Project and the commissioning of the Bawana Gas Turbine Project. 3 Units of 34.07 MW Waste Heat Recovery Cycle Project will be installed at existing Gas Turbine Station at I.P. Estate which will generate 102 MW power on completion. Dadri NCR Power Project will make available 700 MW power supply to Delhi. The implementation of Bawana Gas Turbine Project is essential to meet energy requirement. 600 MW of power would be available to Delhi through this project. Although the Bawana Project is a matter of great priority for the future development of Delhi, the present size of the Eighth Five Year Plan for Delhi cannot absorb its cost even partially. Therefore, only a token provision has been made for it in the 8th Plan. Delhi Administration is hopeful that the project will be urgently taken up in the Central Sector or Private Sector.

Thus, if the above generation projects progress as per schedule, there will be no shortage of power in Delhi. To receive the bulk power supply from NCR Power Project, Dadri and other Central Power Generation Projects in the adjoining States, the work on laying of a 400 KV transmission line around Delhi is being taken up.

Emphasis will be made in the 8th Five Year Plan on strengthening of transmission and distribution system on all voltage levels including 11 KV and L. V. and installation of shunt capacitors. It is also proposed to evolve new designs for the 11 KV distribution system which essentially will improve aesthetics. Segregation of non-essential load from the essential categories is also proposed to reduce the quantum of load shedding.

For the 8th Five Year Plan 1992-97, an outlay of Rs. 1220 crore is approved for Energy Sector as a whole against the expenditure of Rs. 839 crore during the 7th Five Year Plan 1985-90. This amount has been allocated among three agencies viz. DESU, NDMC and Delhi Energy Development Agency (DEDA). The break-up is given below :—

Name of Agency	Sevent Plan Expenditure 1985-90	Expenditure		(Rs. in crore) Approved outlay	
		1990-91	1991-92	Eighth Plan 1992-97	Annual Plan 1992-93
DESU	797.96	195.00	215.44	1172.00	265.00
NDMC	34.22	7.50	6.75	40.00	8.00
DEDA	6.68	1.21	1.55	8.00	2.00
Total	838.86	203.71	223.74	1220.00	275.00

WATER SUPPLY & SANITATION

Water Supply

The present water supply is 472 MGD and by maximising production, it is possible for several weeks in the year, to provide 500 MGD. However, the present requirement of water is 655 MGD and this is expected to go upto 785 MGD by the end of the Eighth Plan. The National Water Policy gives over riding priority to drinking water requirements above all other needs.

The Administration is taking up the matter with the Ministry of Water Resources as well as the Govt. of UP, Haryana, Rajasthan to expedite the agreement on sharing of Yamuna water to ease the situation obtaining in the National Capital. The Administration is seeking the assistance of other neighbouring states to meet its basic need of water. Efforts are being made to procure raw water from the following dams for meeting the raw water requirements of Delhi upto 2001 AD.

Tehri Dam in U. P.	0.37 MAF
Kishau Dam in U. P.	0.50 MAF
Renuka Dam in H. P.	0.2172 MAF (300 Cusecs)

Only Tehri Dam is under construction and the Project reports of Renuka and Kishau dams are to be revised by the respective State Governments. The above Dams are not expected to be completed before the turn of the century. The present level of water supply is 472 MGD in Delhi and it is proposed to augment by 313 MGD by the end of 8th Five Year Plan.

2nd water treatment plant at Haiderpur	100 MGD
New water treatment plant near Mundka Village in Nangloi.	40 MGD
New water treatment plant at Bawana Village	20 MGD
2nd water treatment plant at North Shahdara	100 MGD
3rd water treatment plant in South Shahdara	40 MGD
Water from Ranney wells/Tube-wells	13 MGD
	313 MGD

SEWAGE DISPOSAL CAPACITY

About 80% of the piped water supply come out as sewage. Accordingly, sewage treatment plants are required for disposal of 500 MGD waste water that comes out through sewers. The present sewage treatment capacity has been estimated at 280 MGD and it is proposed to be raised to 500 MGD during 8th Plan i. e. 220 MGD additional capacity.

FINANCIAL OUTLAYS

For the 8th Five Year Plan 1992-97, an outlay of Rs. 820 crore including Rs. 64 crore for raw water arrangement from neighbouring states is approved for water supply and sanitation sector against the expenditure of Rs. 326.62 crore during 7th Plan.

This amount has been allocated among three agencies viz. Delhi Water Supply & Sewage Disposal Undertaking, MCD & NDMC.

The break-up is given below :—

Agency	7th Plan expenditure	(Rs. in crores)			
		Expenditure		Approved outlay	
		1990-91	1991-92	8th Plan 1992-97	Annual Plan 1992-93
Delhi Water Supply & Sewage Disposal Undertaking (DWS & SDU)	294.64	118.25	129.65	785.00	125.00
MCD	2.22	0.67	0.90	5.00	1.00
NDMC	28.06	4.10	4.48	30.00	6.00
Development Department (Rural Sanitation)*	1.70	0.03	0.10	—	—
Total	326.62	123.05	135.13	820.00	132.00

*The scheme has been transferred to Rural Development Sector.

TRANSPORT

Delhi's transport system is under great stress. Delhi's present Transport System is primarily consisting of buses, taxies, three-wheelers, two-wheelers and private cars. The system is undergoing severe strain at various places of the city and certain routes are becoming hazardous from safety and environmental point of view. Delhi's auto-fleet is increasing rapidly causing considerable disturbances to the free flow of traffic. *Delhi's constant feature of road widening and the acceptability of flyovers as strong solutions to the problem, are no doubt still keeping reasonable pace with the traffic requirement but the need for a better and rapid mode of transport has virtually become a necessity now and this need will be felt more acutely in coming years. The strategy in the 8th Plan is based on the following lines :—*

- (a) Interlinking of new residential colonies with the main establishment/trades/commercial centres of the territory.
- (b) Construction of grade separators, flyovers/under-bridges, elevated roads for smooth flow of traffic.

- (c) The system of suitable road network on the outer periphery of the Territory to allow the inter-state traffic passed through such roads avoiding traffic congestion on the city roads.
- (d) Four new ISBTs one for East, 2nd for South, 3rd for North and 4th for West Delhi for better management of inter-state traffic movement.
- (e) Development of Transport Nagars to regulate the Inter-State Traffic flow.
- (f) Mass Rapid Transport network for Delhi.

MRTS is very urgently needed for this Capital city. The objective in the development of a Mass Rapid Transport System is to reduce road congestion. Also the proposed system should have enough scope to meet the increase in transport demand beyond the year 2001. RITES has prepared a detailed project report for Delhi's Mass Rapid Transport System and the feasibility reports are under consideration of the Government. Since the investment decision on the Project is yet to be taken by the Government of India, only token provision has been made for the project in the 8th Plan. Delhi Admn., hope that the Govt. of India will find it possible to offer funds through the Central Sector or enlist the support of the Private Sector. For Planning, co-ordination and monitoring the Mass Rapid Transport System, it is proposed to set up a unified transport authority in Delhi.

In order to remove the congestion on roads it is proposed to undertake strengthening of road network in Delhi and construction of flyovers at busy intersections. The bridge across the river Yamuna at ISBT and Lothian Bridge near GPO Kashmere Gate have already been opened for traffic. The construction work of the flyovers at various intersection like Punjabi Bagh, Raja Garden, Safdarjung and Dhoola Kuan is expected to be completed during the 8th Plan period. The construction of a bridge over Shahdara-Saharanpur Light Railway Line on G. T. Road, near Shahdara Chowk is progressing fast and it is likely to be completed by the end of 1993.

The following bridge projects are in the advanced stage of completion :

1. Construction of bridge over Shahdara Saharanpur Railway Line on G. T. Road near Shahdara Chowk.
2. Road under bridge connecting Mathura Mehrauli Badarpur Road near Thermal Plant.
3. Road over bridge on outer ring road at the crossing of Delhi Mathura Railway Line near Okhla.

The following new roads, bridges and fly-overs/subways are proposed to be constructed during 8th Plan. :—

1. Construction of parallel bridge at Nizamuddin.
2. Construction of parallel bridge at Wazirabad.
3. Construction of parallel bridge at ITO.

4. Construction of new flyovers at :
 - (a) Azadpur Junction; and
 - (b) Ashram.
5. Construction of 3rd ring road.
6. Grade separators at the intersection of Bahadur Shah Zaffar Marg and Din Dayal Upadhyaya Marg.
7. Bridge on Narela Bawana Road near Narela.
8. Grade separator at the crossing of Raj Niwas Marg near Rajpur Road.
9. Construction of elevated roads near Shankar Road.
10. Construction of sub-ways at various places by MCD.
11. Construction of Bye-Pass from Kailash Colony to Haryana Border.
12. Construction of Road in Urban Extension of Narela.

Financial outlays

For the 8th Plan an outlay of Rs. 660 crores has been approved for the following agencies :—

Agency	7th Plan Exp.	(Rs. in crores)			
		Expenditure		Approved outlay	
		1990-91	1991-92	8th Plan 1992-97	Annual Plan 1992-93
Delhi Administration					
PWD	93.24	33.74	37.33	218.00	33.00
Traffic Polic	7.63	3.64	4.52	15.00	3.00
Dte. of Tpt.	15.38	7.02	8.81	34.00	35.00
MCD	207.97	56.54	68.34	368.00	55.00
NDMC	38.42	8.48	8.00	25.00	6.00
DDA (Main)	1.05	—	—	—	—
Total	363.69	109.42	127.00	660.00	132.00

Education

Delhi at present is fairly well equipped in the education field. The network of educational institutions of all varieties is keeping pace with the population's requirements. Presently education facilities are available in more than 3600 schools (primary 2000, middle 485 and secondary/Sr. Secondary 1130). Delhi's growth in the college network is also keeping more or less balanced pace with the population requirements. As per new education policy Delhi Administration has already taken steps for job orientation courses such as Business Management studies, Physical Education, Applied

Sciences for women. Two more colleges for general education, viz. Din Dayal Upadhyaya at Karampura in West Delhi and Dr. Bhim Rao Ambedkar College in Trans Yamuna area at Geeta Colony were also opened in the year 1990-91. Emphasis has been laid to provide infrastructural facilities by constructing suitable school buildings with all facilities for better healthy environment and the process of removing tents has been taken up in a big way and such schools are being shifted in the pucca school buildings. As a result of the expansion of various educational facilities, the literacy rate in Delhi is much higher (76%) as compared to all India literacy rate (43%) in 1991. Literacy rate in Delhi would have been much higher but it is affected by the large scale of illiterate immigrants from the other parts of the country. The persons living in unauthorised colonies, J J Clusters and other habitations are not fully availing the educational facilities due to over all environment around them and lack of awareness. Adult literacy programme will be launched effectively in these areas. At present the responsibility of primary education is with local bodies, MCD and NDMC. On the pattern of model schools, composite schools from Class I to XII were opened from the year 1990-91. A massive programme has been worked out for opening of composite schools in the 8th Plan. The number of composite schools which were 72 in 1991-92 will be increased to 550 in 8th Plan. During the course of 8th Plan period, the Dte. of Education will open 110 new middle schools, besides bifurcation of 45 middle, secondary and senior secondary schools and upgradation of 225 middle and secondary schools. Similarly, MCD will open 200 new primary schools. NDMC will also add 3 new primary schools. As a result of these measures the enrolment of students will increase from 9.64 lacs in 1991-92 to 10.60 lacs in 1996-97 in primary schools, from 5.35 lacs to 6.20 lacs in middle schools, 2.56 lacs to 2.88 lacs in secondary schools, 1.46 lacs to 1.61 lacs in Sr. Sec. Schools.

As a policy measure, the Administration has decided to construct permanent school buildings instead of passing through the stage of semi-permanent structures during 8th Plan period so as to provide healthy environment and other facilities to the children.

FINANCIAL OUTLAYS :

For the 8th Five Year Plan an outlay of Rs. 450.00 crores has been approved for the following agencies :

Agency	7th Plan Exp.	(Rs. in crores)			
		Expenditure		Approved outlay	
		1990-91	1991-92	8th Plan 1992-97	Annual Plan 1992-93
Dte. of Education	131.07	27.31	29.05	245.00	39.00
MCD	50.13	17.41	26.75	191.00	29.75
NDMC	8.33	2.93	3.15	14.00	3.25
Total	189.53	47.65	58.95	450.00	72.00

TECHNICAL EDUCATION :

Though Delhi has made significant progress in the field of Technical Education, much yet remains to be achieved by way of consolidating the existing facilities, improving standards of education, modernising laboratories and workshops and expanding facilities in emerging areas of technology.

The present infrastructure available for Technical Education is as follows :—

Degree level Institutions :

- (a) Delhi College of Engineering, Kashmere Gate.
- (b) Delhi Institute of Technology, Kashmere Gate.
- (c) College of Pharmacy, Pushap Vihar; and
- (d) College of Art, Tilak Marg.

Diploma level Institutions :

- (a) Six Polytechnics : G.T. Karnal Road; Pusa Road; G.B. Pant Polytechnic, Okhla; Women Polytechnic, Maharani Bagh, Ambedkar Memorial Polytechnic, Patparganj; Kasturba Polytechnic, Pitampura.
- (b) Institute of Commercial Practice, Patparganj.

In the 8th Five Year Plan, the construction of new buildings for Delhi College of Engineering at Bawana Road, Delhi Institute of Technology at Papankalan, Ambedkar Memorial Polytechnic at Patparganj and Kasturba Polytechnic at Pitampura is the main target to be achieved.

The following targets for expansion, upgradation and modernisation of technical institutions will be achieved in the 8th Plan:

- (1) Capacity expansion to meet the quantitative and qualitative aspects of the programmes in Polytechnics. It is proposed to increase the intake capacity from 2753 to 3000 students by the end of the 8th Five Year Plan;
- (2) Introduction of new diploma and post-diploma courses in emerging areas of technology;
- (3) Establishment of one more co-educational Polytechnic in Papankalan in South West Delhi.
- (4) Modernisation and strengthening of existing institutions to provide latest machinery and equipment, faculty development, promotion of industry-institute interaction.
- (5) Intake capacity at degree/post-degree Ph. D. levels is proposed to be increased from 475 to 800 in Delhi College of Engineering, 135 to 305 in Delhi Institute of Technology, 150 to 171 in College of Pharmacy and 109 to 155 in College of Art.

Financial outlays :

For the 8th Five Year Plan an outlay of Rs. 110 crore has been approved for the following agencies :—

Agency	7th Plan Exp.	Expenditure		(Rs. in crore) Approved outlay	
		1990-91	1991-92	8th Plan 1992-97	Annual Plan 1992-93
Dte. of Training & Technical Education	6.01	1.81	1.68	15.00	2.50
Delhi college of Engineering	6.49	4.04	6.98	52.00	10.00
Delhi Institute of Technology	20.03	3.09	2.48	140.00	5.00
College of Art	0.83	0.26	0.27	3.00	0.50
Total	33.36	9.20	11.41	110.00	18.00

URBAN DEVELOPMENT :

Due to phenomenal increase in population largely on account of inward migration from the adjoining States, the order of city development has been suffering setbacks. The developed land being a costly affair, the mushroom growth of JJ clusters and unauthorised colonies has distorted the area planning projected in the Master Plan. The heavy pressure on land has resulted in a number of problems like unhygienic conditions in the unauthorised colonies, JJR colonies, urban villages, pressure on civic amenities and encroachment on public land.

To improve the living conditions in the various type of habitats, suitable programmes have been formulated under this sector. These include development of rural and urban villages, provision of additional facilities in JJ Resettlement colonies, development of unauthorised-regularised colonies, strengthening of conservancy and sanitation services, environmental improvement in urban slum and JJ clusters, upgradation of JJ clusters and relocation of JJ squatters etc.

For betterment of the living conditions in the JJ clusters, a three dimensional approach has been worked out. It has been estimated that there are 1,00,000 families in JJ clusters located on the land earmarked for various development projects which need to be shifted for the implementation of these projects. Such families will be allotted alternative plots of 18 sq. mt. and these encroached sites will be cleared to start the projects for which these sites are earmarked. The relocated JJ dwellers will be provided loan of Rs. 15,000/- by DCHF Society to enable them to construct their own houses on new plots. However, GOI is not in favour of this programme and suggested that relocation may be adopted only when land owning agencies accept to bear the full cost of relocating the JJ squatters from their land to other developed areas. The other alternative to shift some of the JJ Clusters to outside Delhi NCR towns is also being considered in consultation with the NCR Planning Board.

About 80,000 families are living in various JJ clusters located on such sites which need not be cleared immediately. It has been decided to realign such JJ Clusters in order to upgrade them. On re-alignment, the residents of these clusters will be allotted

suitable plots on these very sites and the facilities like roads, paths, public toilets, drains, street lighting etc., will be provided in these localities. Financial assistance in the form of loan will be provided to the residents of these clusters to enable them to construct their own houses. The scheme will be implemented only on receipt of NOC from land owning agencies. Another alternative may also be explored by declaring such JJ clusters as slum areas. In the 3rd category also, there are about 80,000 families for which the ongoing programme for environmental improvement will continue by providing minimum civic amenities. Nehru Rojgar Yojana and Urban Basic Services Programmes will take care of the economic and community welfare aspects of the residents of JJ clusters/colonies to provide them better self employment opportunities as well as sanitation/public toilet/primary health care facilities to improve their living conditions.

The Katras located in the Walled City will be repaired. It is also proposed to construct flats at various other places also for the residents of dangerous Katras.

The 44 resettlement colonies, developed earlier by DDA, will be provided additional facilities viz. roads, drains, community halls/barat ghars, street lighting, sulabh sauchalayas, sewerage etc., to make them more convenient for the residents. 539 unauthorised colonies, which have already been regularised till now, will be developed by providing various civic amenities.

49 unauthorised colonies which are yet to be regularised are also proposed to be provided with minimum civic amenities. The conservancy and sanitation services will be strengthened to take care of all developed colonies, JJ colonies as well as JJ clusters by providing mechanical sweepers, tipper-trucks, wheel barrows, refuse collectors etc. The 36 slum colonies transferred to MCD will also be developed to meet the minimum civic standard norms.

Financial outlays :

For the 8th Five Year Plan an outlay of Rs. 400 crore has been approved for the following agencies :—

Agency	7th Plan Exp.	Expenditure		(Rs. in crores) Approved outly	
		1990-91	1991-92	8th Plan 1992-97	Annual Plan 1992-93
MCD	197.40	76.98	78.83	264.37	93.20
NDMC	7.22	1.71	1.75	8.00	1.50
DDA	18.53	0.12	0.05	0.25	0.05
Slum Wing	87.83	13.73	22.65	56.88	11.35
L & B (Land Record)	—	0.02	—	—	—
L & B (NCR fund)	—	—	—	11.00	1.00
LSG (UBS)	0.68	1.06	1.15	7.50	1.50
Nehru Rojgar Yojana	—	0.40	0.40	2.00	0.40
U.I. Deptt. (Share Capital to Slum Imp. Board)	—	—	—	50.00	8.00
Total	311.66	94.02	104.83	400.00	117.00

MEDICAL :

The approach adopted in the 7th Five Year Plan to provide health care facilities in all localities of the Union Territory of Delhi by opening of new hospitals, health centres, dispensaries, maternity and child welfare centres will continue in the 8th Five Year Plan so that health care facilities may be available in all areas rather than their concentration at few selected points. OPD services in Jaffarpur and Khichripur have been already started and efforts are being made to start OPD services in Jahangirpuri before March, 1993. The construction of buildings for 100 bedded hospitals at Pooth Khurd, Siraspur and Maidan Garhi will be taken up. DDU hospital at Hari Nagar has started functioning with 500 beds capacity. The 500 bedded GTB hospital-cum-medical college, Shahdara is being expanded with the addition of 250 beds. The bed capacity of G.B. Pant Hospital will be increased by about 200 beds with the completion of 110 bedded block and some other internal arrangements within the existing building. A new building for Civil Hospital will be constructed to increase its bed capacity from 30 beds to 100 beds. A new 100 bedded Hospital will be set up at Raghubeer Nagar.

The Centralised Accident and Trauma Services, which has started functioning in West Zone, will start functioning with its network of a number of ambulances in all the six zones. This project also envisages setting up of a number of Trauma Centres in the various existing hospitals. Joint Sector Hospital being set up in collaboration with Appolo Hospital, Madras will also be ready to provide services to the public in the Eighth Five Year Plan.

A new block will be constructed for Guru Nanak Eye Centre to increase its bed capacity by 150. A number of colony hospitals of the M. C. D. will be expanded by constructing suitable accommodation for these hospitals along with essential duty staff quarters. Hindu Rao Hospital, Swami Daya Nand Hospital, RBTB Hospital, ID Hospital, Kasturba Hospital, G L. Maternity Hospital will be expanded with the construction of new buildings along with staff quarters. Sufficient provision has also been made to purchase various new equipments and machinery for modernisation and expansion of all existing hospitals. A cancer hospital is also proposed to be set up at Janakpuri. The Construction of buildings for 500 bedded B.R. Ambedkar Hospital at Rohini is proposed to be completed by 1996-97.

FINANCIAL OUTLAYS :

For the 8th Five Year Plan an outlay of Rs. 308.80 crore has been proposed for the following agencies :—

Agency	7th Plan Exp.	(Rs. in crore)			
		Expenditure		Approved outlay	
		1990-91	1991-92	8th Plan 1992-97	Annual Plan 1992-93
A. Delhi Admn.					
(a) Dte. of Health Services	27.73	8.61	5.35	63.90	10.00
(b) Din Dayal Upadhyay Hosp.	18.05	5.73	6.17	43.00	9.00

(c) Guru Teg Bahadur Hospital	38.91	7.76	6.77	43.00	8.50
(d) Central Jail Hosp.	0.33	0.02	0.05	0.40	0.12
(e) Civil Hospital	0.68	0.27	0.26	2.00	0.30
(f) H.M.D., Shahdara	0.65	0.10	0.94	6.00	1.25
(g) Guru Nanak Eye Centre	2.93	0.30	0.10	2.50	0.35
(h) L.N.J.P. Hosp.	15.31	4.95	4.93	40.00	7.00
(i) M.A.M. College	5.81	1.19	1.29	9.00	1.50
(j) G.B. Pant Hosp.	26.35	13.64	7.20	43.00	9.00
(k) C.A.T. Services	0.50	1.55	—	2.00	0.25
(l) Joint Sector Hosp.	14.22	1.00	--	2.00	0.25
Total Delhi Admn.	151.47	45.12	33.06	256.80	47.52
B. MCD	23.33	12.98	9.50	47.00	9.50
C. NDMC	4.14	0.90	1.10	5.00	1.00
Total	178.94	59.00	43.66	308.80	58.02

HOUSING :

This sector of development covers only a small fringe of the total housing activities in the Territory. The housing programmes for general public being executed by DDA are financed from their own resources. Only staff quarters for employees of Delhi Administration, MCD, NDMC and financial assistance to Delhi Coop. Housing Financial Society are major programmes included under this sector.

For the 8th Five Year Plan, an outlay of Rs. 100.00 crore is approved for this sector which includes Rs. 25 crore for Annual Plan 1992-93. It is planned to construct about 2000 staff quarters for Delhi Administration employees. About 1500 staff quarters for MCD employees will be completed and construction work will be taken for about 1300 quarters. For NDMC employees about 1200 staff quarters will be constructed.

Delhi Cooperative Housing Finance Society will provide loan of about Rs. 250 crore to 25,000 members of various Cooperative Group Housing Societies. For this purpose, we propose to provide Rs. 25 crore as share capital to Delhi Cooperative Housing Finance Society during the 8th Five Year Plan. DCHFC is also going to implement a scheme for providing loan to the Coop. Societies of JJ dwellers to be resettled in the new localities. To take care of Shelterless population, 10 new Night Shelters will be constructed during the 8th Five Year Plan.

A massive programme for construction of houses on hire purchase basis for safai karamcharies of MCD will also be taken up in a big way. An amount of Rs. 12.50 crore is approved for this purpose. The scheme has already been started. 800 Houses at Rohini and 300 Houses at Nand Nagri are under construction.

Financial outlays :

For the 8th Five Year Plan an amount of Rs. 100.00 crore has been approved for the following agencies :—

Agency	7th Plan Exp.	Expenditure		(Rs. in crore) Approved outlay	
		1990-91	1991-92	8th Plan 1992-97	Annual Plan 1992-93
A. Delhi Admn.					
(a) Constn. of staff qtrs. for employees of Delhi Admn.	16.23	4.39	5.4	25.00	5.85
(b) Police Housing (Residential Schemes)	17.99	8.67	—	—	—
(c) Police Station/Police Post Bldg.	19.75	3.59	6.41	Reflected in Public Works Sector	
(d) House Bldg. advances to Govt. servants	2.00	—	—	—	—
(e) Share capital contribution to DCHFS	12.62	4.50	6.00	25.00	5.50
(f) Housing loan	0.82	0.03	0.02	0.30	0.05
(g) House Sites for landless labourers	0.78	0.01	—	1.50	0.30
(h) Acquisition & dev. of land	5.00	—	—	—	—
Total A	75.19	21.19	17.91	51.80	11.70
B. MCD	21.70	5.37	9.55	41.00	11.00
C. NDMC	10.65	1.30	1.40	4.20	1.50
D. DDA	0.70	—	—	—	—
E. Slum Wing	13.82	2.17	2.10	3.00	0.70
Total	122.06	30.03	30.96	100.00	25.00

PUBLIC HEALTH AND SANITATION :

For the effective implementation of the Prevention of Food Adulteration Act 1954, the PFA Department will be strengthened suitably during the 8th Five Year Plan. A new food and drug laboratory has been set up at Lawrence Road for timely analysis of the samples collected both by the PFA Department as well as Drug Control Department. With a view to maintain the hygienic conditions in the Restaurants, Dhabas and other eatable food shops and street vendors, PFA Department is implementing licencing provisions of the PFA

Act by issuing licences to all these categories of operating agencies. A new Forensic Science Lab. will be set up for Delhi Police. The Malaria Control Programme with the thrust on mosquito eradication will continue during the 8th Five Year Plan. Keeping in view the increase in the population of the Territory, a number of new cremation grounds are also proposed to be set up in different localities. During the 8th Five Year Plan, more new electric crematoria will be set up at new sites.

Financial outlays :

For the 8th Five Year Plan an outlay of Rs. 41.20 crore has been approved for the following agencies :—

Agency	7th Plan Exp.	Expenditure		(Rs. in crores)	
		1990-91	1991-92	Approved outlay	
				8th Plan 1992-97	Annual Plan 1992-93
A. Delhi Admn.					
(a) PFA	1.16	0.41	0.88	3.00	0.66
(b) Drug Control	0.08	—	0.003	1.00	0.15
(c) DHS	0.15	—	0.004	0.20	0.04
(d) Delhi Police Forensic Science Lab.	—	—	0.003	1.00	0.25
Total (Delhi Admn.)	1.39	0.41	0.89	5.20	1.10
B. MCD	26.61	4.34	4.66	35.00	5.70
C. NDMC	0.26	0.17	0.14	1.00	0.20
Total	28.26	4.92	5.69	41.20	7.00

PUBLIC WORKS :

With the increase in the number of offices of Delhi Admn., MCD and other agencies, new office buildings for all these agencies will be constructed during the 8th Five Year Plan. The major programmes included under this sector are :—

1. Construction of Block-II of MSO Building at IP Estate for Delhi Administration offices.
2. Construction of District Court Building at Shahdara including Lawyers Chambers.
3. Construction of District Court Building at Rohini.
4. Construction of new buildings for the MCD Zonal offices in different localities and civic centre at J.L. Nehru Marg.
5. Construction of Police Stations/Police Posts Buildings.

Financial outlays :

For the 8th Five Year Plan an outlay of Rs. 70.00 crore has been approved for the following agencies :—

Agency	7th Plan Exp.	Expenditure		(Rs. in crore) Approved outlay	
		1990-91	1991-92	8th Plan 1992-97	Annual Plan 1992-93
A. Delhi Admn.	4.02	4.41	6.20	55.00	12.25
B. MCD	13.51	2.50	3.00	15.00	2.75
C. NDMC	1.05	—	—	—	—
Total	18.78	6.91	9.20	70.00	15.00

SOCIAL WELFARE :

Preventive, developmental and rehabilitative services are provided to the vulnerable sections of the society under the Social Welfare sector. The main objectives of the programmes implemented under this sector are :—

- (i) To reduce the various social problems like beggary.
- (ii) To take care of the old and infirm, destitutes and orphans.
- (iii) To provide education, training and employment to the socially, physically and mentally handicapped persons.
- (iv) To extend protection to women and girls.

A number of schemes/programmes are being implemented under this sector to protect these groups from anti-social elements and to promote their welfare. These schemes provide a comprehensive network of institutional and rehabilitative services. In the 8th Plan buildings for the following institutions will be constructed :—

1. Nursery/Primary school and Hostel for deaf and blind at Nehru Vihar.
2. Construction of two school buildings, one for deaf and the other for Mentally Retarded in Trans-Yamuna area.
3. Construction of Primary School for deaf at Rohini.
4. Construction of Begger Home at Lampur.
5. Construction of School for Blind Boys at Timarpur.
6. Half way home for improved mental discharged persons by Hospital for Mental Diseases, Shahdara.

Building for Home for Mentally Retarded at Avantika is almost completed. Similarly, the building for residential-cum-Boarding school for Mentally retarded children is being completed by NDMC. Building for the working girl Hostle will be constructed by NDMC at Laxmi Bai Nagar.

The scheme for providing financial assistance of Rs. 100/- per month to old age persons (60 years and above) will also continue in the 8th Five Year Plan.

Financial outlays :

An outlay of Rs. 6.00 crore is approved for Social Welfare Sector against the expenditure of Rs. 9.85 crore during the 7th Five Year Plan. The break up of the approved outly between Directorate of Social Welfare and the New Delhi Municipal Committee (NDMC) is as follows :—

Agency	7th Plan Exp.	Expenditure		(Rs. in crore) Approved outlay	
		1990-91	1991-92	8th Plan 1992-97	Annual Plan 1992-93
		1. Dte. of Social Welfare	9.12	0.72	0.95	5.50	1.10
2. NDMC	0.73	0.23	0.20	0.50	0.15
Total	9.85	0.95	1.15	6.00	1.25

NUTRITION :

Before beginning of the 8th Five Year Plan, 26 Integrated Child Development Service Projects were functioning in Delhi with emphasis on (1) supplementary nutrition (2) Immunisation (3) Health Check-up (4) Nutrition and Health Education (5) Non-formal education (6) Referral Services. These ICDS Centres have been opened specially in the areas inhabited by the weaker sections such as resettlement colonies, unauthorised colonies, slum areas. One more ICDS project will start functioning in Annual Plan 1992-93. Thus by the end of 8th Five Year Plan, there will be 27 ICDS projects which will cover 3.36 lacs beneficiaries. The Mid-day meal scheme for primary school children will continue.

Financial outlays :

For the the 8th Five Year Plan an outlay of Rs. 32.00 crore has been approved for the following agencies :—

Agency	7th Plan Exp.	Expenditure		(Rs. in crore) Approved outlay	
		1990-91	1991-92	8th Plan 1992-97	Annual Plan 1992-93
		1. Directorate of Social Welfare	15.03	1.15	3.67	19.25	4.00
2. Dte. of Education	0.17	0.09	0.11	0.75	0.15
2. MCD	7.32	1.00	1.20	11.40	2.75
4. NDMC	1.20	—	0.10	0.60	0.10
Total	23.72	2.24	5.08	32.00	7.00

WELFARE OF SCHEDULED CASTES/SCHEDULED TRIBES :

The various schemes for socio-economic development of Scheduled Castes are being implemented under different sectors under special component plan, Financial outlays have been quantified to ensure benefits for Scheduled Castes from such developmental schemes.

The Welfare of SC/ST sector deals with the schemes exclusively formulated and implemented since long for socio-economic and educational development of Scheduled Castes.

These schemes provide meritorious scholarship to SC students, financial assistance for books and stationery, vocational and technical scholarship for ITI students and economic assistance through Delhi SC Financial & Development Corporation. Need based loan to the extent of Rs. 35,000/- is sanctioned by the Corporation to these beneficiaries with the participation of Nationalised Banks. The Corporation has till 1991-92 provided financial assistance to about 21,000 applicants and an amount of Rs. 11 crore was sanctioned to them. Elimination of scavenging and rehabilitation of scavengers will be an important programme in the 8th Five Year Plan.

Financial Outlays

For the 8th Five Year Plan an amount of Rs. 24.50 crore has been approved for the following agencies :—

Agency	7th plan Expenditure	Expenditure		(Rs. in crore) Approved outlay	
		1990-91	1991-92	8th Plan 1992-97	Annual Plan 1992-93
1. Dte. for the Welfare of SC/ST	9.56	2.90	2.86	16.75	3.10
2. Delhi Scheduled Caste Financial Dev. Corpn.	2.00	0.53	0.54	6.75	0.75
3. NDMC	—	0.07	0.17	1.00	0.15
Total	11.56	3.50	3.57	24.50	4.00

INDUSTRIES :

Delhi is one of the largest centre of small scale industries in the country. There has been ten fold increase in number of industrial units since 1951 which is now more than 85,000.

Since 1987, Delhi Administration has adopted a policy of encouraging only small scale industrial units in Delhi with exception to industrial units capable of making bricks and other products utilising fly-ash generated by Thermal Power Station over the years. Delhi Admn., DDA and DSIDC have developed a large number of industrial estates and flatted factories complexes at Okhla, Naraina, Lawrance Road, Maya

puri, Jhilmil Colony, Jhandewalan and Wazirpur Industrial area. 500 plots in Patpar Ganj Industrial Estate and 1535 plots at Narela Industrial Complex were allotted in 1990. Slum Wing constructed 2919 work centres for economically weaker sections including SC/ST of which 922 work centres were allotted by Dte. of Industries in May, 1991. Further allotment is being done by DSIDC to the eligible persons. Under Badli Industrial Estate (Phase-III) about 50 plots have been developed.

In view of land constraint in the present situation there is no further scope to develop any new industrial complex. To check migration and to control pollution, it is also required not to develop any more Industrial Estate/Complex in Delhi. Based on this strategy, the plan proposals for 8th Five Year Plan under Industries sector has been framed.

The emphasis in the Plan is on :

1. Modernisation and technology upgradation.
2. Quality control.
3. Development of institutes such as Hi-Tech. Vocational Training Centre, Auto Parts Development Centre and Polymer and Plastic Development Centre.
4. Electronics, plastics, light engineering, garments, handloom, handicrafts, leather.
5. Export promotion.
6. Pollution control.
7. Generation of self-employment.

High-Tech. Vocational Centre is being set up at Okhla with the assistance of Govt. of Italy. This project will serve as a centre for training on computerised numerically controlled machines (CNCM) using the latest technology. All the machinery for the centre has already been received from Italy and the building is under construction which will be completed by Dec., 92.

A product-cum-Process development centre for house-hold electrical appliances will be set-up in Delhi with UNDP/UNIDO assistance to ensure safety of electrical appliances and to develop design and prototypes of electrical appliances which would compete more effectively in the international market.

A society for Self-Employment provides training to the educated unemployed persons belonging to economically weaker sections so as to enable them to set up their own ventures or seek gainful employment. The society has two training centres one is located at Flatbed factories at Jhandewalan and also opened a centre at Weaver's Colony at Nand Nagri in the trans-Yamuna area. The training is provided in repair of radio and T.V. Repair and maintenance of house-hold electrical appliances/fittings, Refrigeration and Air-Conditioning, Plumbing, Fashion designing for women and Carpentry. Till Sept., 1992 about 1350 candidates have been trained in different trades. Some more new trades are also being introduced.

Delhi State Industrial Development Corporation (DSIDC) arrange raw material for SSI Units. In the 8th Five Year Plan, DSIDC introduces a new scheme of Environmental Education and Clean Process Technology, to advise on the necessary means to save precious raw-materials, like nickle, chromium etc. being wasted presently and also reduce the level of pollution.

The Delhi Financial Corporation provides financial assistance for fixed assets such as land, building, plant and machinery to the entrepreneurs for setting up industries under its various schemes. The financial assistance is also made available for modernisation, expansion and diversification to the existing industries. It has special schemes of self employment for ex-servicemen (SEMFEX) and Mahila Udyam Nidhi Scheme (MUN) for the benefit of women entrepreneurs. The Corporation has also adopted a scheme for the marketing of products of tiny, cottage and small scale industry.

The financial base of the Corporation will be further strengthened by providing plan funds in the form of share capital during 8th Plan. An outlay of Rs. 2.00 crore has been approved for the purpose in the 8th Plan.

The Delhi Khadi & Village Industries Board gives financial assistance in the form of loans and grants on liberal terms i.e. interest rate of 4 percent per annum for setting up village industries in the Union Territory of Delhi.

Financial outlays :

For this sector an outlay of Rs. 30 crore has been approved for 8th Five Year Plan against the expenditure of Rs. 52.34 crore during 7th Plan. An expenditure of Rs. 11.25 crore in 1990-91 and Rs. 13.09 crore in 1991-92 was incurred under the sector. For the Annual Plan 1992-93, an outlay of Rs. 6 crore has been approved.

LABOUR AND LABOUR WELFARE :

The programme included under this sector aims at welfare of the industrial workers and labourers, improvement in the functioning of the Employment Exchange for better and quick placement of services of the unemployed persons registered with the Employment Exchanges and modernisation of the training being provided in different trades in the ITIs.

The working system of the Employment Exchanges is proposed to be computerised in a planned manner. Five new holiday homes are also proposed to be set up for the industrial workers. The following steps will be taken up for upgradation of ITIs :—

- Buildings for the ITIs at Narela and Jaffarpur to be constructed.
- In addition to the existing 13 ITIs, two new ITIs to be established at Okhla and Papankalan.
- Seating capacity in the ITIs to be increased from 7936 to 9200 by the end of Eighth Plan.
- Training-cum-Production centres to be established in the ITIs.

- Equipment maintenance workshops to be established in ITIs.
- Basic Training Centre to be expanded for strengthening the apprenticeship training programme.
- Upgradation of the quality of the training by removal of obsolscence, modernisation of workshops and training of teachers.

NDMC has also opened one Woman Technical Institute at Netaji Nagar in 1990-91. The present enrolment is 300 girl candidates. This Institute has started providing regular training courses in (1) Cutting & Tailoring (2) Embroidery (3) Stenography (4) Dress making (5) Beautician & Skin care (6) Music (7) Art & Craft. These courses are job oriented and provide employment opportunities to women both in public & private sectors.

Financial Outlays

For the 8th Five Year Plan an outlay of Rs. 14 crore has been approved for the following agencies :—

Agency	7th Plan Exp.	Expenditure		(Rs. in crore) Approved outlay	
		1990-91	1991-92	8th Plan	Annual Plan
				1992-97	1992-93
Labour Department	0.64	0.02	0.23	3.00	0.40
Dte. of Trg. & Tech. Education	5.22	1.78	1.39	9.25	2.28
Dte. of Employment	0.39	0.15	0.17	1.50	0.30
NDMC	0.01	0.15	0.10	0.25	0.02
Total	6.26	2.10	1.89	14.00	3.00

AGRICULTURE :

The cultivated area is shrinking fast due to urbanisation of rural areas and ever increasing demand of land for housing purposes. As a result of urbanisation the net area sown which was 81,000 hectares in 1971 has decreased to 48,000 hectares in 1990. The strategy adopted for this sector is to use intensive cultivation methods for more productive and remunerative use of limited agricultural land. The farmers education programme is also being expanded so as to adopt the correct cropping pattern in the areas of food crops and vegetables. The high yielding varieties programme is being given full coverage in all the 5 CD blocks. With a ready market for all agricultural and horticultural products available in this metropolitan city, emphasis is being laid on bringing more area under vegetable production, which is more remunerative than food crops in this Territory. The major schemes included under this sector are setting up of Bird-cum-Wild Life Sanctuary, modernisation of Idgah slaughter house with the help of Hangarian Government plantation of trees by the various departments of Delhi Administration and its allied agencies, development of community parks and gardens in the harijan basties and rural villages, Improvement of Veterinary Services and Control of contageous diseases.

Financial outlays :

For the 8th Five Year Plan an outlay of Rs. 45 crore has been approved for the following agencies :—

Agency	7th Plan Exp.	Expenditure		(Rs. in crore) Approved outlay	
		1990-91	1991-92	8th Plan 1992-97	Annual Plan 1992-93
1. DELHI ADMN.					
(a) Development Department	13.85	4.04	5.65	16.85	5.85
(b) Agriculture Marketing	0.15	0.01	0.03	0.15	0.04
2. MCD	1.37	0.48	0.47	27.00	5.02
3. NDMC	0.95	0.72	0.37	1.00	0.59
Total	16.32	5.25	6.52	45.00	11.50

RURAL DEVELOPMENT :

According to 1981 census, the composition of urban and rural population was 58 lacs and 5 lacs respectively i.e. 93% urban population and 7% rural population. As per Census Report of 1991, the urban population is 84 lacs and rural population is 10 lacs. Thus the rural population has increased almost double during last one decade. There are 369 villages in Delhi of which 258 villages are still having their rural character while 111 vilages have by and large urbanised. Rural area consists of five community development blocks, viz. Alipur, Kanjhawla (Nangoli), Najafgarh, Mehrauli and Shahdara. Plan development in Delhi is taking place in such a way that distinction between the rural and urban areas of Delhi is diminishing day by day.

To ensure integrated development of rural villages, Development Department of Delhi Administration has proposed a new scheme in the 8th Five Year Plan in the name of "Integrated Development of Rural Villages". In addition to developmental works being undertaken under different sectors, such as, construction of rural roads, rural water supply, rural electrification, construction of hospitals, opening of schools, etc., it is proposed to undertake various developmental works under the proposed new scheme for rural areas :—

- (a) House-hold Industries.
- (b) Infrastructural facilities.
- (c) Commercial Centres and Work Centres.
- (d) Construction of Sulabh Sauchalayas.
- (e) Fencing of Gaon Sabha Land.
- (f) Community facilities/construction of Panchayat Ghars etc.

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Rural Development sector also includes other programmes such as Integrated Rural Energy Programme and Consolidation of Holdings, etc.

Financial Outlays :

For 8th Five Year Plan an outlay of Rs. 24.75 crore has been approved for the following schemes :

Agency	7th Plan	Expenditure		Approved outlay	
	Expn.	1990-91	1991-92	8th Plan 1992-97	Annual Plan 1992-93
1. Development Department	1.61	0.93	6.90	20.85	4.16
2. D.C. Office	0.05	0.01	—	0.40	0.09
3. Delhi Energy Development Agency	4.26	1.16	0.85	3.50	0.75
Total	5.92	2.10	7.75	24.75	5.00

FLOOD CONTROL AND DRAINAGE :

The schemes have been formulated keeping in view the city's drainage requirements alongwith the expansion of residential areas and the likely potentiality of River Yamuna to pose flood threats, At the same time, the flood water entering the Territory from the Haryana side is also to be managed through the construction of drains that is the existing Najafgarh Drain and new supplementary drain to the Najafgarh drain. The major schemes under this sector are construction of supplementary drains phase-I, construction of Rohini Drainage Scheme, construction of Nilwal Drainage Scheme, construction of drainage scheme for Dwarka, Sarita Vihar, Vasant Kunj, Re-modelling of Pankha Road Drain. Sufficient funds have been provided for re-modelling/improvement of existing drains.

Financial Outlays :

An outlay of Rs. 40 crore has been approved in 8th Plan for Flood Control sector against the expenditure of Rs. 52 crore in the 7th Plan. Rs. 10.64 crore in 1990-91 and Rs. 8.96 crore in 1991-92 were invested under this sector. A provision of Rs. 10 crore is approved for Annual Plan 1992-93.

**Sector-wise expenditure during 7th Plan, Annual Plans 1990-91, 1991-92
and Approved Outlay for 8th Plan 1992-97 and Annual Plan 1992-93**

(Rs. in Crores)

Sl.	Name of the Sector	Exp. in 7th Plan 1985-90	Expdr. 1990-91	Annual Plan 1991-92 Expdr.	Approved Outlay 8th Plan 1992-97	Approved Outlay 1992-93
1	2	3	4	5	6	7
1.	Power	838.86	203.71	223.74	1220.00	275.00
2.	Transport	363.69	109.42	127.00	660.00	132.00
3.	Water Supply & Sanitation	326.62	123.05	135.14	820.00	132.00
4.	Urban Development	311.66	94.02	104.83	400.00	117.00
5.	General Education	189.53	47.65	58.95	450.00	72.00
6.	Medical	178.94	59.00	43.66	308.80	58.00
7.	Housing	122.07	30.03	30.96	100.00	25.00
8.	Tech. Education	33.36	9.20	11.41	110.00	18.00
9.	Flood Control	51.85	10.64	8.96	40.00	10.00
10.	Rural Development	5.92	2.10	7.75	24.75	5.00
11.	Industries	52.34	11.25	13.09	30.00	6.00
12.	Public Works	18.78	6.91	9.20	70.00	15.00
13.	Other Administrative Services	2.37	7.19	9.71	39.00	8.75
14.	Agriculture	16.32	5.25	6.53	45.00	11.50
15.	Public Health	28.26	4.92	5.69	41.20	7.00
16.	Nutrition	23.72	2.24	5.08	32.00	7.00
17.	Sports & Youth Services	5.66	2.33	2.48	14.00	2.90
18.	Welfare of SC/ST	11.56	3.46	3.57	24.50	4.00
19.	Labour Welfare	6.26	2.01	1.90	14.00	3.00
20.	Science, Technology & Environment	1.34	0.52	0.11	2.50	0.35
21.	Art & Culture	14.78	2.41	2.53	12.00	2.50
22.	Jail Building	1.52	0.99	1.88	12.00	1.50
23.	Minor Irrigation	4.55	1.04	1.21	8.00	2.00
24.	Social Welfare	9.85	0.95	1.15	6.00	1.25

1	2	3	4	5	6	7
25.	Tourism	3.10	0.82	1.00	6.00	1.00
26.	Survey & Statistics	1.27	0.16	0.14	2.00	0.50
27.	Co-operation	2.32	0.39	0.38	2.50	0.50
28.	Information & Publicity	2.35	0.59	0.53	2.00	0.50
29.	Sectt. Eco. Services	1.18	0.18	0.36	2.00	0.40
30.	Weights & Measures	0.51	0.02	0.06	0.50	0.10
31.	Civil Supplies	0.88	0.05	0.05	1.00	0.20
32.	Stationery & Printing	—	0.18	0.10	0.25	0.05
33.	Medium Irrigation	0.05	—	—	—	—
GRAND TOTAL		2631.47	742.68	819.15	4500.00	920.00

AGRICULTURE & ALLIED SERVICES

The cultivated area is shrinking fast due to urbanisation of rural areas and ever increasing demand of land for housing purposes. As per the 1991 census, the total area of Delhi is 1,48,300 hectares out of which 44,000 hectares fall under urban limits and 1,04,300 hectares under rural; comprising of 74,000 hec. cultivable land and 30,300 hec. of village abadi, gaon sabha, public facilities etc.

At present floriculture and vegetable production has been given more importance. As such instead of food grains production, more area is being diverted for production of vegetable and floriculture production to enable the farmers to get more returns from their lands. The trend of production is as under :—

Sl. No.	Item	Unit	1991-92 Target	Achievement	1992-97 Targets	1992-93 Targets
1.	Food Grains	000 Tones	177.00	172.00	177.00	173.50
2.	Veg. Production	do	673.00	627.81	3280.00	656.00
3.	Floriculture Production	Acre	1465.00	3160.00	9000.00	1600.00
4.	Milk Produc- tion	000 Tones	250.00	290.00	300.00	250.00
5.	Fish Production	Million	3.40	3.40	4.00	3.40
6.	Eggs Production	do	92.00	92.00	100.00	92.00

Financial Achievements for the 7th Five Year Plan 1985-90 and Annual Plans 1990-91 and 1991-92, approved outlays of 8th Five Year Plan 1992-97 & Annual Plan 1992-93 under various programmes are as under :—

(Rs. in lacs)

Sl. No.	Major Programme	Expenditure			Approved outlay	
		7th Plan 1985-90	1990-91	1991-92	8th Plan 1992-97	Annual Plan 1992-93
1.	Crop. Husban- dry	378.81	175.43	181.97	700.00	224.00
2.	Agriculture Mar- keting	14.57	1.00	2.67	15.00	4.00
3.	Soil Conservation	6.87	2.17	2.40	10.00	3.00
4.	Forest	595.90	204.13	314.46	715.00	285.00
5.	Animal Husban- dary	362.78	123.51	137.43	3000.00	614.00
6.	Fisheries Develop- ment	49.34	18.66	13.52	60.00	20.00
Total: Agriculture & Allied Service		1632.27	524.90	652.45	4500.00	1150.00

The details of schemes included under various programmes in the 8th Five Year Plan are as under:

A—Crop Husbandry

1. *Strengthening of Agriculture Extension under National Extn. Project—(Rs. 20 lacs)*

Objective of the Scheme :—The main objective of the scheme is to increase agriculture production by adopting latest improved agriculture techniques, taking more than 2-3 crops per hect., maximum consumption of fertilizer per hect. through the re-organised extension system which is known as Trg. & Visit programme. Under the schemes, the subject matter specialists are provided monthly training at IARI, who provides fortnightly trg to the entire extension staff. The VLW's make weekly/fortnightly visits to their areas on fixed days and propogate the latest technology through 50 contact farmers per VLW. Each contact farmer further spread the technology to atleast 10 non-contact farmers. At present the anticipated level of agriculture production in U. T. of Delhi is 1,68,000 M. T. which is proposed to be increased to 1,78,000 M. T. by the end of the Eighth Plan. Similarly, the per hect. consumption of fertilizer which is 114 kg. per hect. is proposed to be increased to atleast 138 kg. per hect. by the end of the Eighth Plan. The ultimate aim of this scheme is to compensate for the loss of Agriculture production which is due to urbanisation and reduction in cultivable area.

2. *Need/Justification* :—The need for execution of this scheme is to create awareness amongst the farmers through the extension agency so that the farmers should be able to adopt the latest technology on their fields. Instead of the farmers going to various places for technology, the technology is to be brought at the farmers door by the extension agency so that it is implemented as soon as possible.

The following staff has been recommended by the Govt. of India for implementing the T&V programme in the Union Territory of Delhi :—

1. Joint Director (Agri.) Extn.	1	3000-5000
2. Dy. Director/Sub. Div. Officer (Agriculture)	2	3000-4500
3. Subject matter specialists in Agronomy, Hort. Plant Protection and Trg.	4	3000-4500
4. Extension Officer (Agri.)	4	1640-2900
5. Village & Extn. Workers	23	1400-2300
6. Statistical Officer	1	2000-3500
7. Statistical Assistant	2	1400-2300
8. U. D. C.	2	1200-2040
9. L. D. C./Typist	2	950-1500
10. Stenographer	2	1200-2040
11. Driver	2	950-1500
12. Peon	2	750-940

The case of creation of above posts have already been referred to Finance Deptt. and is pending with A.R. Deptt. of Delhi Admn.

The approved outlay for 8th Plan and Annual Plan 1992-93 will be utilised in the following manner :—

Item	(Rs. in lacs)	
	1992-93	1992-97
(a) Office exp.	0.35	3.00
(b) Demonstration material	0.30	2.80
(c) POL & repair of vehicle	0.30	2.40
(d) Material & Supply	2.90	2.90
(e) Audio visual aids & equip,	0.50	2.90
(f) Study Tours	0.15	1.00
Total	4.50	15.00
Civil Work	1.50	5.00
G. Total	6.00	20.00

2. Farm Management and Crop Production—(Rs. 5.00 lacs)

The scheme of farm management-cum-crop-production envisages that the farmers of Delhi Territory should be educated about farm management and cropping pattern so that they can get maximum production and profit within the limit of available sources. This programme has become more important under the present strategy of agriculture as the availability of seeds and agriculture machinery etc. is too scarce. The propagation of latest technologies through distribution of mini kits and by laying demonstration plots is also the objective of the scheme. These would include.

- (a) Biodynamic gardening and organic Agriculture.
- (b) Production of high value crops.
- (c) Micro irrigation.

For effective implementation of the scheme following posts would be required:

		Rs.
(1) Deputy Director (Agriculture)	1	3000-4500
(2) Asstt. Director (Agriculture)	1	1640-2900
(3) Technical Asstt.	2	1400-2600
(4) Lab. Asstt.	2	1200-2400
(5) Fieldmen	3	750-960

Rs. 5.00 lacs for 8th Five Year Plan (1992-97) and Rs. 1.00 lac for Annual Plan 1992-93 have been approved. The physical targets for 8th Five Year Plan and Annual Plan 1992-93 have been fixed as 300 demonstration plots and 60 demonstration plots respectively.

3. Strengthening of Plant Protection Unit—(Rs. 55 lacs)

It is a well known fact that advancement and introduction of latest technology in the agricultural field have also increased the development of insect, pests, diseases, nematodes, rodents and weeds on account of highly favourable conditions. There is not a single food crop, vegetable, fruit, fodder, ornamental plant etc., which is immune to pests or diseases. Plant Protection has been identified as a vital input, which plays a significant role in production. Keeping a very conservative estimate, about 15-20% losses are caused by various insects, pests, diseases, rodents and weeds. These agents are attacking crops at every stage as well as in the storage.

The scheme is being implemented since 1965-66 but with the advancement of Plant Protection techniques, the work load has increased. The scheme is proposed to be strengthened suitably to cope with the increased work for getting increased production from various crops & vegetables.

This work could not be completed in the Seventh Five Year Plan. It is proposed to continue it in the 8th Five Year Plan.

The scheme was studied by the Administrative Reforms Deptt. of Delhi Admn. and creation of 5 posts was recommended after their study. The details of such posts are given below :—

		Rs.
(a) Legal Asstt.	1	1640-2900
(b) UDC	1	1200-2040
(c) Store-keeper	1	1200-2040
(d) LDC	1	950-1500
(e) Ballif	1	750-940
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The financial and physical targets proposed to be achieved during the 8th Five Year Plan is given below :—

S. No.	Particular	Approved outlays	
		92-97	92-93
		(Rs. in lacs)	
1.	Financial outlay	55.00	15.00

Further the break-up of approved outlay of Eighth Five Year Plan period is given below :—

S. No.	Particulars	(Rs. in lacs)	
		1992-93	1992-97
1.	Pay & Allowances	0.25	3.75
2.	Purchase of pesticides and equipments	12.25	40.50

3. Subsidy	2.00	3.25
4. Office expenses	0.50	2.50
Total	15.00	50.00

Physical targets :—The physical target proposed to be achieved under various activities during the Eighth Five Year Plan period are given below :—

S. No.	Particulars	1992-93	(in thousand hect.) 1992-97
1.	Area under pests & disease control	81	470
2.	Area under treated seeds	26	140
3.	Weed control	28	160
4.	Rodent control	100	500
	Total	235	1270
5.	Stored grain pests (thousand tonnes)	60	400
6.	Consumption of pesticides (MT).	78	425
7.	Drawal of samples (Nos.)	50	525

4. *Improvement of Seed Multiplication Farms/Setting up of New Seed Farm—*
(Rs. 28 lacs)

Seed is one of the most important agricultural inputs responsible for increasing yield of various crops per unit area. With the introduction of dwarf and high yielding varieties of wheat and hybride varieties of some other crops, agriculture production of the country has considerably increased during the last 25 years as a result of which India has become self sufficient in food grains.

Objective of the Scheme is to produce good quality, genetically pure seeds of various crops and to supply these seeds to the farmers of Delhi year after year, so that the spread of good and high yielding variety seeds continues. Development is an unending process and in view of continuously increasing population of the country, greater stress is required on the spread and use of high yielding varieties which are evolved by various Research Institutes from time to time.

Good quality seeds are essential to take higher production from various crops of cereals, oil seeds, pulses and vegetables etc. In the U.T. of Delhi, the area put under various crops every year is given below :—

1. Wheat	44,000 hecets.
2. Paddy	7,000 hecets.
3. Bajra	7,000 hecets.
4. Oil seeds	6,000 hecets.

5. Pulses	4,000 heccts.
6. Other crops	5,000 heccts.
7. Vegetables	45,000 heccts.

The entire requirement of various seeds cannot be produced at Govt. level. However, it is proposed to produce seeds to meet about 5-10% of the demand and the remaining demand will be met from National Seeds Corporation and other private seed growers in the U.T. of Delhi seed certification agency has also been establishing in U. T. of Delhi to produce certified seeds of various crops.

Considerable area of various crops is also covered through natural spread of varieties by the farmers through Block Development Offices. At present two seed farms are functioning at Alipur and Hauz Rani with an area of 45 acres and 71 acres respectively. Third seed farm was established during the year 1984-85 on 50 acres land allotted by Dy. Commissioner, Tis Hazari, Delhi out of surplus land in village Punjab Khore but farming operations had to be stopped due to stay order of Delhi High Court and the case is under consideration of High Court.

Programme Contents :—To implement the scheme properly, additional staff to run the Punjab Khore Farm will be required. However, necessary posts will be got created after the decision of High Court in this regard is received. The details of required posts are given below :—

1. Farm Manager	1	1640-2900
2. Farm Assistant	1	1400-2300
3. Tractor Driver	2	950-1500
4. Tubewell Operator/Electrician	1	950-1500
5. Truck Driver	1	950-1500
6. Beldar/Labour	15	750-940
7. Field Man	1	750-940
8. Chowkidar	2	750-940
	24	

Besides the above funds are also required to meet labour and cultivation charges on the existing farms at Alipur and Hauz Rani also.

Physical & approved Financial targets under the scheme as follows :—

S. No.	Item	Target (Rs. in lacs)	
		1992-93	1992-97
1.	Funds for cultivation charges/labour staff etc.	9.00	23.00
2.	Capital for Fencing Building etc.	1.00	5.00
		10.00	28.00

S. No.	Item of expenditure	1992-93 (Qtls.)	1992-97 (Qtls.)
1.	Production of improved seeds of cereals, pulses oil seed, fodders etc.	1190	6,000

5. *Strengthen of Seed Certification Scheme—(Rs. 6 lacs)*

The Seed Certification Scheme was sanctioned during 1981 of the 6th Five Year Plan and seed certification unit was set up within the frame work of the Development Deptt. Delhi vide notification No. SCA/Seed Act/82-83/11825 dt. 13-7-82. The scheme has been carried over to the 7th Five Year Plan as an on-going scheme.

*Objective of the Scheme :—*Seed is an important Agricultural input and it is the duty of the State/UT's Governments to produce and supply good quality seeds to their farmers so as to enhance the production and income of the farmers. The Govt. of India had directed States/UT's to set up Seed Certification Agencies under the provisions of the Seed Act, 1966 (50 of 1966) and as such a seed certification scheme was sanctioned for the Union Territory of Delhi in the year 1982-83.

*Needs justification :—*Though the scheme was sanctioned in the year 1982 with the provision for recruitment of required number of Technical and Ministerial staff but due to the continuous ban on the creation and filling of new posts, almost all the posts provided in the scheme remained vacant during 6th Five Year Plan except Seed Certification Inspector and one UDC which were filled up before the imposition of the ban. These two posts are included on Non-plan side. At present the strength is :—

(i) Seed Certification Inspector	Three
(ii) UDC	One
(iii) Peon	One

Besides the above one UDC, one Stenographer and one Peon has been taken from other scheme.

*Programme contents :—*Seed Certification services will be provided to the seed grower in the U.T. of Delhi. These seed Certification Inspector and other officers will visit the fields at growth stage so as to ensure that the seed produced is genetically pure and true to its kind. Strict supervision will be exercised at all stages.

The scheme initially implemented in the year 1982 with skelton staff is now included on Non-plan side. Scheme is likely to continue till the demand for seed certification is forthcoming from the seed growers and the quality certified seeds are in demand by the farmers.

Since the staff provided is quite inadequate and according to the norms laid down by the Govt. of India the following addl. staff is required under the 8th Five Year Plan (1992-97) :

S. No.	Name of the Posts	No. of Posts	Scale of pay Rs.
1.	Chief Seed Certification Officer	1	3000-5000
2.	Seed Certification Officer	1	2000-3500

3. UDC	1	1200-2046
4. LDC	1	950-1500
5. Chain man	3	750-940
6. Chowkidar	1	750-940

6. Financial target and physical targets :—

The following are the financial and physical targets for the year 92-93 & for 8th Five Year Plan :—

Financial Targets

S. No.	Item	1992-93	Total 8th Plan 1992-97 (Rs. in lacs)
1.	Salary	0.15	0.15
2.	Material & supply	0.50	2.60
3.	Office Expenses	0.25	1.50
4.	P.O.L./vehicle repair	0.10	0.75
5.	Capital Works	—	1.00
	Total	1.00	6.00

Physical Targets

S. No.	Item	Unit	Actual Ach. 91-92	Target Annual Plan 92-93	93-94	8th Plan (1992-97) 96-97
1.	Area under certified seed registered	Hect.	665	800	800	800
2.	Certified seed produce	000 qt.	20.2	20.00	21.00	24.00
3.	Revalidation of certified seed.	000 qt.	0.03	1.00	0.50	0.50

6. *Strengthening of Seed Testing Lab.—(Rs. 15 lacs)*

*Objective of the Scheme :—*Quality seed is a pre-requisite for Agriculture production therefore it is very essential to maintain the quality of seeds. The importance of the development of good seed programmes has been emphasised by the various commissions and committees on agriculture. The main function of seed testing laboratory is to obtain accurate results, regarding the purity moisture contents, the rate of occurrence of other crops seed and their percentage. Therefore, from quality seeds it is expected to produce normal seedlings under favourable conditions. The seed testing laboratory is meant as a service laboratory for seed producers, seed dealers and a Govt. seed farms where multiplication of seeds of important agriculture crops is being undertaken.

Programme contents under VIII Plan :—The Govt. of India, Ministry of Agriculture, Deptt. of Agriculture & Co-operation has already conveyed technical approval for the above case vide their letter No. 18-58/87-SD dated 11-2-1987. The following posts are to be created :—

Name of the post	Pay scale (Rs.) (Pre-revised)	No. of posts
(a) Seed Analyst	700-1300	1
(b) Seed Testing Asstt.	425-700	4
(c) Lab. Asstt.	330-560	6
(d) Lab. Attendant	210-260	6
(e) U. D. C.	330-560	1
(f) L. D. C.	260-400	1
(g) Peon	196-232	1
(h) Chowkidar	196-232	1
(i) Sweeper	196-232	1

The main contents of the programme are as under :—

1. Salary	Nil
2. Contingency	13.00 lacs
3. Capital	2.00 lacs

The following financial targets have been approved during 1992-93 to 1992-97.

S. No.	Item	92-93	92-97 (Rs. in lacs)
1.	Salary	—	—
2.	Contingency	1.50	13.00
3.	Civil Works	0.50	2.00
	Total	2.00	15.00

Physical targets seed sample testing :—

1991-92	1992-93	1992-97
500	1000	6000

7. Implementation of Fertiliser Control Order —(Rs. 5 lacs)

The fertiliser has been notified as one of the essential commodities under the Fertiliser Control Order Act, 1957 and Essential Commodities Act which was issued under section (3) of 1957. Under the Fertiliser Control Order Act all the fertiliser dealers are required to get themselves registered and submit progress reports to the Registering Authority as well as Block Development Officer so as to implement fertiliser

control effectively. The main job of the Inspectors was to check the dealers periodically in their respective area and draw samples. To implement the fertiliser control order, the following staff has been proposed so as to exercise checks in 140 fertiliser dealers/sale points. The qualification of Fertiliser Supervisor is B. Sc. (Agri.).

S. No.	Name of the Post	No. of Posts	Pay Scale
1.	Fertiliser Quality Control Officer	1	3000-4500
2.	Fertiliser Inspectors	2	1640-2900
3.	Fertiliser Assistant	1	1200-2040
4.	Typist	1	950-1500
5.	Stenographer	1	1200-2040
6.	Class-IV Fieldman	1	750-940

For 8th Five Year Plan Rs. 5.00 lacs and for Annual Plan 1992-93 Rs. 1.00 lac has been approved. The physical target for 7th Five Year Plan and Annual Plan 1992-93 are 500 samples & 100 samples respectively.

8. *Distribution of Sludge & Manure—(Rs. 40 lacs)*

The scheme of "Sludge Distribution" and "Petrol Supply" are in operation under the Development Department. Delhi Administration under "Grow More Food Scheme" since 1952 with the cost of Rs. 64.30 lacs. The schemes at that times were headed by an independent class II officer with suitable supporting staff like Head Clerk, Accountant etc. to operate these schemes. The target for sludge distribution used to be about 4000 tonnes per annum with a fleet of 4 trucks. During the past years the number of trucks had increased to 22 with annual sullage, target of 40,000 tonnes. Sludge produced in the sewage treatment plants is supplied to the farmers and other horticulturists at nominal rates on their fields. The departmental petrol pump supplies petrol to 850 vehicles of Delhi Admn.

Though work under this scheme has increased considerably Class II post of Manure & Fertiliser Officer were downgraded to Class III with pay scale of Rs. 1600-2600 alongwith retrenchment of some other posts of Head Clerk and Accountant etc. It had become very difficult to operate the scheme. The A.R. Deptt. Suggested certain modifications. Final review has not been made available so far. However their main recommendation is to club these three schemes and provide adequate controlling supervisory staff. To improve the working of the above said three schemes it is essential that these may be suitably strengthened by providing required staff and funds.

With a view to improve and streamline the work under the schemes of "Sludge Distribution", "Petrol Supply" and Custom Cultivation, it is essential that adequate staff may be provided. Sludge is the most important input to increase agricultural production. For proper development of Horticultural activities and kitchen gardening in the urban area, sludge manure plays a most important role to improve aesthetic surroundings of the metropolitan city of Delhi. Without proper strengthening, the result of Schemes will not be achieved to the desired extent.

It is proposed to create the following posts so as to provide better controlling/supervisory and other required staff to improve working of these schemes which is essential according to changed circumstances :—

Name of post	No. of Posts	Pay Scale
(a) Agriculture Engineer	1	3000-4500
(b) Manure & Fertiliser Officer	1	1640-2900
(c) U.D.C.	1	1200-2040
(d) L.D.C.	2	950-1500

At present there are 18 trucks available under the scheme. Most of these trucks were purchased during the year 1975-76 and have become quite old and operationally uneconomical and are required to be replaced to keep the supply of sludge in order.

Financial Target :—An amount of Rs. 40 laes (Rs. 39 lacs Revenue + Rs. 1.00 lac capital) has been approved for Eighth Five Year Plan 1992-97. For Annual Plan 1992-93 an amount of Rs. 10.00 lacs has been approved.

Physical :—The targets for 8th Five Year Plan for the sludge distribution have been fixed at 1,50,000 tonnes and Annual Plan 1992-93 have been fixed at 30,000 tonnes.

9. *Strengthening of existing Semi-Mechanical Compost Plant at Okhla, NDMC— (Rs. 56 lacs)*

NDMC Compost Plant was set up in the year 1985 and is functioning since then. It is not only helping improve the environment but is also engaged in treating the refuse/garbage through mechanisation process and preparation of compost. The NDMC Compost Plant installed at Okhla is of 200 MT capacity but due to inadequate machinery/equipment its capacity has gone down. In order to have optimum use of the plant and for the treatment of garbage which is increasing day by day on account of growing population of the city it is necessary that this capacity is enhanced and the requisite machinery/equipment are procured and attached to the plant to augment it to its full capacity so as to cope up with the additional work.

The above proposals involve several processes like (i) reception of refuse/garbage (ii) segregation of refuse (iii) shredding of refuse and size reduction (iv) decomposition of refuse etc. and in addition to above, small Workshop is also needed for carrying out repairs of the vehicles and for their maintenance including of machines and equipments. The following broad machines/equipments shall be required :

1. Turning & Areating Machine.
2. Pulverisation Mill.
3. Purchase of Machinery.
4. Construction activities viz. Civil & Electrical etc.

During 1990-91, a sum of Rs. 27 lacs were allocated under plan head for Strengthening of Mech. Compost Plant by way of purchase of loader, installation of Turning & Areating Machine and also to provide shed over the Vibratory Screen including laying of C.C. flooring. 100% achievement was made during the year 1990-91. There was also a provision of 8 lacs during the year 1990-91 for the construction of Compost Plant Workshop and the said amount was fully utilised.

During 1991-92, there was a budget provision of Rs. 15 lacs, part of the amount was utilised on the two ongoing schemes of 1990-91, i.e., installation of Turning & Areating Machine and providing shed over the Vibratory Screen including laying of C.C. flooring. 100% achievement was made during 1991-92.

Besides the above, we have already made a request to the D.D.A. for allotment of additional land measuring about 8.9 acres adjacent to the existing Compost Plant or to allot 20 acres of land anywhere in Delhi for setting up of additional Compost Plant and thus, this will be a long way in solving the problem of the garbage and also to solve the problems of NDMC garbage vehicles. As such, the total estimated cost of the proposal would be Rs. 222 lacs including the cost of land and development as per the details during the 8th Five Year Plan, i.e. 1992-97.

The proposal will enhance the present capacity of the Compost Plant and by this arrangement, it is expected that we shall be able to avoid getting the surrounding vitiated due to foul smell emanating from the garbage which is brought from all corners of Delhi for dumping. Augmented capacity of the Compost Plant will not only improve the environment but will also help in increasing the production of Compost Plant and disposal of the garbage in a healthy way.

The approximate cost of the overall project proposed to be undertaken during the 8th Five Year Plan, i.e. 1992-97, shall be Rs. 222 lacs whereas the approved outlay for 8th Five Year Plan as intimated vide this Office under the sector Agriculture and Allied Services is Rs. 56 lacs. However, provisions have been kept in view of the above projects which are essentially required to be undertaken during the 8th Five Year Plan.

The targets proposed to be undertaken during the 8th Five Year Plan which will attract expenditure on the development works are given as under :—

- (i) Installation of Turning & Areating Machine (ongoing scheme 1991-92);
- (ii) Providing Fire Prevention & Safety Measures;
- (iii) Setting up of a laboratory;
- (iv) Cost of land and its developmental works;
- (v) Construction activities, installation of Turning & Areating Machine;
- (vi) Pulverisation Mill;
- (vii) Elect. & allied works;
- (viii) Strengthening of workshop;
- (ix) Purchase of machinery;
- (x) Purchase of 1 no. fogging pump-set; and
- (xi) Covering of wind-rows & platforms.

The above scheme is covered under the Agriculture & Allied sector under the head Strengthening of existing Mechanical Compost Plants, Okhla, (ongoing scheme). From time to time and depending upon the various schemes, approval of the competent authority shall be obtained for execution of work when sufficient funds are also available. The above proposal is likely to finish during the 8th Five Year Plan itself. All out efforts shall be made to keep the expenditure within the sanctioned estimates.

With regards to construction work which is proposed to be undertaken, it is needless to mention that all out efforts are being made to get the land allotted from D.D.A. adjacent to the existing Compost Plant, Okhla. so that the existing administrative block can be fully utilised for the expansion of the Compost Plant. If at all, DDA is unable to allot the said land and allot us the land somewhere else in Delhi for expansion of the Compost Plant, then in that case, the approval of the plan shall fall within the purview of the local bodies. The approved outlay for the 8th Five Year Plan (1992-97) is Rs. 56 lacs out of which Rs. 15 lacs is for 1992-93.

Food Processing Schemes

10. Rural Food Processing and Nutrition Extension Programmes—(Rs. 3 lacs)

*Need :—*Should it not alarm us that an appreciable percentage of Delhi's population suffers from chronic malnutrition? Is it in the interest of the Delhi Administration to neglect the problem of the malnutrition which cuts of the roots of all efforts for development of human resources? Is it feasible for the Development Department, Delhi Admn. to create a separate infrastructure at the periphery for providing nutrition education for nutrition promotion and food processing to the communities in Delhi? These and many other similar questions have been engaging the attention of the Development Department, Delhi Admn. for quite sometime. The problem of malnutrition is no longer considered a result of food deficiency or as a health problem but recognised as a multifaceted problem interfering with all efforts for development of human resources. Increased food production through use of innovative agricultural practices is a necessary condition but not sufficient itself to ensure nutrition for all. Thus malnutrition needs to be recognised as a National problem and not a sectoral problem. The history of nutrition programmes in the country has passed through various phases. Such as medical/clinical phase, food production phase, community development phase and is now passing through a multisectoral phase with emphasis on socio-economic of malnutrition. Malnutrition being a multifaceted problem requires a multi-sectoral approach for its solution.

Many inputs, including those from the various allied fields viz. Food processing, preservation are required for the control and preventions of malnutrition. Nutrition education for the people is one of the important tools for nutrition promotion. So far nutrition education has largely been confined to food related aspect only. It has now been recognised that education of 'Non-food factors' such as health care, hygiene, environmental sanitation etc. also is equally important for nutrition promotion of the people. The rural food processing and Nutrition Extension scheme of the Development Deptt. Delhi Admn., Delhi will play a small role in this gigantic task. The basic objective of the scheme is to equip the rural community with basic message on food and nutrition food processing and preservation through establishing Rural Food processing centre in Delhi and their contact points namely, field level functionaries belonging to various sectors of the Government concerned with providing nutrition, health and other welfare services.

Delhi is spread over an area of 1485 Sq. Km. out of which 891 Sq. Km. is rural and 592 Sq. Km. is urban area. The land for agricultural purpose is depleting very fast. The administration is, therefore, giving trust for developing agriculture for production of fruits and vegetables in Delhi as there is ready market for the same and for further add to the income of the farmers.

The Rural Food Processing and Nutrition Extension Units will, infact, help in raising nutritional status as well as income of the farmers family. The production and availability of fruits and vegetables fluctuates and during the season these are available at throw away prices. In India fruits and vegetables production as per official estimate put, it is 50 million tonnes almost 40% of our food grain production, a very small quantity of our total production of fruits and vegetables is processed and preserved. Estimate put it less than 1% in India while in U.K. 45%, U.S.A. 55% and in Canada it is 50%. Thus over 30% of the fruits and vegetables produced in India remains unutilised and goes waste due to lack of technical know-how and inadequate preservation facilities available within reach to the farmers and public. And if the fruits and vegetables and processed foods are preserved and packed properly in the peak season these can be kept and utilised beneficially during lean period. Thus help in maintaining nutrition all status of daily diet on cheaper rate besides minimising losses of precious protective food from being wasted. In condition of surplus due to poor marketing/transporting facilities, Rural Processing and Nutrition Extension Units would open avenues for exporting processed food and their production can create additional demand for additional fruits and vegetables, thus encouraging production as well.

It is, therefore, beneficial to encourage and inculcate the habit of food processing among the masses of different socio-economic groups. The food processing interest not only help uplifting their nutritional standard but will also add to the income out of their rural produce.

OBJECTIVES :

- (i) To equip the rural community of Delhi with messages on Food and Nutrition and food processing through extension techniques.
- (ii) To promote cultivation of fruits and vegetables in Delhi for use of Rural Food processing and Nutrition Extension units and motivate farmer to adopt scientific innovative technology of food processing in their day to day life.
- (iii) To popularise food processing programmes for increasing the agriculture produce through processing their produce and extension techniques.
- (iv) To procure and process seasonal fruits and vegetables and manufacture their products including dehydrated products viz. Raw Mango Chips; Pickles Jams; Juices etc. and sale them on No Profit No Loss basis, thus popularising processed food among masses.
- (v) To popularise mustard and other oil seeds, pulses, cereals and process them for their product viz. oil; development of weaning foods; Dalia etc. and make them available on No Profit No Loss basis to the rural public and to the Social Welfare programmes, child Development in the direct Nutrition Intervention programme.
- (vi) To strengthen potato cultivation programme for processing their products viz. chips, wafers etc. for sale on No Profit No Loss basis to the rural public.

BENEFITS OF THE SCHEME

1. Help raising nutritional standard through food processing and nutrition extension techniques.
2. Help reducing the present wastage of perishable foods which is almost 30% of the production.
3. Help raising food hygiene standard and combating food adulteration practice prevalent in the area.
4. Making available the processed food at cheaper rates on No profit No loss basis.
5. Increasing self employment through home scale industry development.
6. Augmenting rural farmers income.

The programme is rural based and to achieve the objectives of the scheme, out of the three proposed units, one is coming up at Kharkhari Nahar in Najafgarh. The building is under construction. Under the scheme units it is proposed to provide custom services to the farmers for processing their produce in the Rural Food processing centre. The scheme will benefit rural farmers as well as rural population. On construction of the building the posts proposed in the scheme will be created for implementing the scheme programmes.

Physical Targets :—The Najafgarh, Nangloi and Alipur have major crop area under oil seeds, pulses, fruits and vegetables and cereals. The physical targets for processing of fruits and vegetables on custom services basis is proposed 4000 quintals during 92-93. The figures for major crop area in these areas are given below :—

Potato	Mustara	Pulses	Vegetables
161 Hect.	835 Hect.	120 Hect.	4116 Hect.
1185 M.T.	1670 M.T.	778 M.T.	41250 M.T.

Under the scheme units it is proposed to provide custom services for oil extraction pulse processing, wheat milling and processing of fruits and vegetables alongwith development of weaning foods in consultation with ICDS/Social welfare child development programme weeds. The scheme will benefit rural population as well as rural farmers Each unit will be equipped with oil extraction, pulse processing, wheat milling and food processing machines and equipments and will be supervised by technical staff to cater to the need of the block.

Income :—On account of nominal custom charges on the processed products some income to the Govt. is also expected.

Machines and equipments :—The site is proposed in the Najafgarh block at Masoodabad Nursery or any other place in the block decided by the competent authority.

1. Oil extraction plant and accessories and unit.
2. Pulse processing plant and units.
3. Wheat milling plant and accessories.
4. Fruit and vegetable processing plant.

Staffing Pattern :—The staff for each unit is proposed :—

1. Dy. Director (Rural)	1	3000-4500
2. Sr. Manager	1	2000-3500
3. Manager (oils)	1	1640-2900
4. Manager (pulses)	1	1640-2900
5. Manager (Fruit preservation)	1	1640-2900
6. Store-keeper	1	1200-2040
7. Accountant	1	1400-2300
8. L.D.C.	2	950- 500
9. Cashier-cum-Salesman	1	1200-2040
10. Mechanic-cum-Machine Operator	3	1200-2040
11. Skilled Labour	6	950-1500
12. Chowkidar	2	750-940
13. Driver	2	950-1500
14. Mechanical Engineer	1	1640-2900
15. Electrician	1	950-1500
16. Unskilled labour	2	750-940
17. Steno	1	1200-2040
	28 Nos.	

Budget requirement :

	92-93	93-94	96-97
1. Salary of staff	1.00	2.00	4.00
2. Machine & equipment	1.00	2.00	4.00
3. Office expenses	0.20	0.50	2.00
4. Purchase of vehicle/POL/ Repair	1.80	1.80	0.50
5. Raw material	—	—	2.00
6. Misc.	—	—	0.50
	4.00	6.30	15.00
(7) Total capital requirement		92-97	20.00 lacs

11. Strengthening of Preservation of Fruits and Vegetables—(Rs. 4 lacs)

Need :—The preservation of fruits and veg. is very important for minimising the wastage of 30% of fruits and veg. (out of total quantity) produced in the country and the other, for making availability of minimum 200 gms. of fruits and veg. to the individual in daily diet as recommended by Indian Council of Medical Research (ICMR) in 1984 recommendations. A large number of fruits and veg. are grown in our country and their production is often so high that every year we have substantial seasonal surplus. Fruits and veg. are perishable and thus, they are available at very low prices during the peak season. So, if these seasonal fruits and veg. are preserved, it will extend the availability of fruits and vegetables in all seasons, and thus add to the nutrition of the people. In India, because of the poor preservation

facilities and no technical know-how is available to the common man, the wastage of fruits and veg. accounts for 30% of the production. The techniques of preservation are simple and needs to be extended to the Delhi population (97 lacs) through training programmes. Apart from this for intensive preservation of fruits and veg. for public, it is important to increase and strengthen Food Processing Programmes by popularising processed foods and arranging their sale on No profit No loss basis for the benefit of the common man.

The Delhi area is spread over an area of 1483 sq. miles, out of which 891 sq. km. is rural and 592 sq. km. is urban area. The rural area is compared of 5 blocks having population of 4.5 lacs as per census data reported in Delhi Admn. statistical book 1987. Due to fast urbanisation process and increasing population pressure on Delhi's land, the preservation of fruits and veg. and processing of foods plays a vital role now-a-days. In Delhi, Agricultural produce marketing committee (APMC) Azadpur, Delhi is one of the Asia's biggest fruits and vegetables Mandi where various seasonal fruits and veg. produced in India are brought for sale round the year. Most of the fruits and veg. and other foods are thus available to the population of Delhi in abundance in their season at low-prices. So, the preservation of fruits and vegetables plays a vital role for making them available to Delhites round the year on reasonable rates as the production and availability of fruits and veg. fluctuates vastly from season to season. Apart from this, incondition of surplus preservation and processing of foods opens wide avenues for exporting foods and food products and hence, create an additional demand for growing of more fruits and veg. by the growers.

The strengthening of preservation of fruits and veg. scheme of the Development department, plays small role in the wide range of food processing activities. With the taking over of food processing schemes by the Development deptt., it becomes all the more important to have expanded activities in food processing field for establishment of training centres, production centres and other allied activities in rural/urban areas of Delhi so that it may cover the entire population of Delhi. The objective of scheme are as under :—

Objectives :

- (i) To popularise preservation of fruits and veg. and food processing programmes through training programmes and other extension techniques.
- (ii) To set-up training centres in various parts of Delhi so as to cover the entire population.
- (iii) To encourage home scale/cottage scale preservation for help starting of food processing industry.
- (iv) To arrange sale of chemicals, preservatives, food colours, Essences etc. used in preservation in small packings on No profit No loss basis for popularising preservation of fruits and veg. practices.
- (v) To prepare and arrange processed fruits and veg. products for sale on No profit No loss basis and popularise processed foods.

TARGETS :

The following targets have been proposed under the Scheme :—

	91-92	92-93	96-97
1. Camps	50	100	100
2. Beneficiaries	1500	1500	1500
3. Sale of chemicals	0.25	0.5	0.5

FINANCIAL TARGETS :

Revenue	92-93	96-97
1. Salary of Staff	1	6
2. Equipment/machines/ purchase of/repair/raw material etc.	1	1
3. (a) Teaching dais/publicity	0.5	0.5
(b) Purchase of jeep	2.5	1
Office expenses stipend/ working kits etc.		

CAPITAL :

Construction/repair and renovation of centre	1	1
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STAFF REQUIREMENT :

S. No.	Name of the post	Staff required	Pay scale in Rs.
1.	Dy. Director (pres.)	1	3000-4500
2.	Demonstration Officer	5	1640-2900
3.	Demonstrator	2	1400-2300
4.	Lab. Assistant	2	950-1500
5.	Lab. Attendent	5	750-940
6.	U.D.C.	2	1200-2040
7.	Head Clerk	1	1400-2300
8.	L.D.C.	6	950-1500
9.	Driver	3	950-1500
10.	Chowkidar	6	750-940

The Dy. Director (Preservation) will be co-ordination with different programmes of Food processing schemes proposed to be implemented by the Department during 8th Plan and will be head of office for implementing Food Processing Schemes in the department. As the post of the D.D.(P) is yet to be created, the F.N.E.O. will be co-ordinating with different programmes and will be head of office meanwhile. The effort will be made to create these posts in the 8th plan so that the physical and financial target set-out for 8th plan under this sector could be achieved as per the schemes. The Approved outlay for the 8th Five Year Plan (1992-97) is Rs. 4 lacs out of which Rs. 3 lacs for 1992-93.

12. *Raising health hygiene and Nutritional Status through distribution of minikits for SC/ST/Poors (SCP)—(Rs. 3 lacs)*

Need :—The attention of Govt. of India for uplifting the most unprivileged class of the society viz. Rural/urban poor has been since inception of Independence and in recently years Hon'ble Prime Minister has stressed the need for over all developments of this class through various Govt. schemes and programmes including preservation policy. The scheme under the sector of food processing plays a vital role in implementing Govt. policies through states/U.T. at the grass root level. In Delhi alone there are more than 14860 of families on record belonging to SC/ST/Poor and accounts their population over 104012. Infact in real sense no benefit can be passed on to the poor people unless their health, hygiene and Nutritional status is taken into consideration for uplifting them in the society from physical mental and financial constraints. Health and hygiene plays a vital role in the overall development of a family and poor families suffers most for want of practical awareness in this regard. The financial help oriented scheme for poors is generally unidimensional in nature while the need of the today is of multi divisional schemes.

Keeping the above points in mind, it is proposed to launch integrated welfare scheme for weaker section of the society including SC/ST and poor families for creating practical awareness for hygiene, health and Nutrition Extension programme of Nutrition and Food processing under the direct supervision of Food and Nutrition Extension Officer, Delhi Admn., Delhi.

The kits will be distributed among the poor families of U.T. Delhi. The contents of the kit will contain hygiene material and food processing utencils and equipments alongwith relevant literature.

Objects of the scheme :

1. To encourage fruits preservation and food processing among the weaker section of the society through education and encouraging it through distribution of preservation minikits so as to help raising their nutritional status health and hygiene standard of poor families of Delhi people.
2. To create awareness and generate interest for processed food among the poor families for inclusion of protective food in their diet.
3. To encourage fruit preservation on home/cottage scale for developing self employment ventures for generating their family income.

Benefits of the scheme :

The benefit of the scheme will flow to the targeted group viz. SC/ST/Poor families through use of the kit equipments :—

- (a) 2500 poor families including SC/ST/Poors will be getting the benefit of the scheme thus beneficiaries will be 10,500 or more in the family.
- (b) The distribution of kits will arouse interest in creating a hygienic atmosphere in their family and thus preventing medical expenses, arising due to faulty poor habits.

Programme and operational area

The scheme will be implemented in U.T. Delhi. The extension education through audio, visual and demonstration will be organised by the Food and Nutrition extension officer and the kits will be distributed to them. The beneficiaries will be selected through social organisation, voluntary organisation, B.D.O. and other similar agencies and direct by the F.N.E.O. also. The beneficiaries will be given short term, training to use the contents of the kits. The following targets have been proposed for VIIIth plan.

Targets	No. of kits	Beneficiaries
1992-93	500	500
1993-94	500	500
1994-95	500	500
1995-96	500	500
1996-97	500	500

The cost of the kit has been fixed at Rs. 1000/- per kit.

*Budget requirement :***A. REVENUE :**

(i) Cost of the kit	92-93	5.00 lacs
(ii) -do-	93-94	5.00 „
(iii) -do-	94-95	5.00 „
(iv) -do-	95-96	5.00 „
(v) -do-	96-97	5.00 „

25.00 „

B. Handling charges for packing loading/unloading kit @ 10/- Kit for 92-97

0.25 lacs

C. Honararium/leaf lets/stationary andivisional aid etc. for 92-97	1.00 lacs
D. Field vehicle for fact finding	1.50 „
	<hr/>
	27.75 „
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Staffing pattern

The scheme has no staff component and the work of this scheme will be carried out by the Food and Nutrition extension officer with the assistance of his own staff. An honararium of Rs. 500/- per month will be paid from the funds of the scheme for the entire VIIIth plan 1992-97. The provision of the staff in the scheme will make the scheme budget heavier and will burden the Delhi Admn. without much gain. A provision of the honararium to the implementing officer will help smooth implementation of the scheme, without any expenditure on salary component.

VI. Agricultural Engineering

13. Improvement of Irrigation Facilities—(Rs. 25 lacs)

Irrigation is the artificial application of water to the soil for the purpose of crop production. Irrigation water is supplied to supplement water available from rainfall and the contribution to the soil moisture from ground water. In most of the areas, the amount and timing of rainfall are not adequate to meet the moisture requirement of the crops and irrigation. It is, therefore, essential to make adequate irrigation arrangements to raise crops necessary to meet the needs of food, vegetables, oil seeds, pulses etc. The increasing need for crop production for the growing population is causing the rapid expansion of irrigation system. Water being a limited resource, its efficient use is basic to the survival of ever increasing population.

During the last 20 years, irrigation has contributed to a great extent in raising production of various crops, vegetables etc. Out of the total cultivable area of 74,000 Hects., 51,600 Hect., is now under irrigation. 5734 Hects. area is irrigated by canals, 1315 by sewage irrigation and the remaining area is irrigated by shallow and deep tubewells, private as well as government.

Average annual rainfall of Delhi is 66 Cms. which also varies from year-to-year and most of it is received during July to September. Good crops, therefore, can be raised only with the help of irrigation. With a view to get higher production from the limited area, Cultivators have installed tubewells to meet irrigational needs and during the last 20 years, more than 1400 tubewells have been installed. Actually, the ground water is not sufficient to meet the requirements of all the tubewells adequately due to which the water tables has decreased by 10 to 30 ft. It is, therefore, essential to utilise the deficient irrigation water in a most efficient manner. Use of such pipes and irrigation channels and other improved system will be encouraged which do not cause loss of water in transit by providing subsidy at 50% of expenditure, subject to a maximum limit of Rs. 4,000/- per acre and Rs. 20,000 per farmer whichever is less.

It is contemplated to create awareness among the farmers to use deficient and limited water resources in a most efficient manner and avoid losses during transit. At present, there is no scheme with the Development Deptt., Delhi Admn. through which guidance encouragement is provided to the farmers to construct/adopt modern water conveying systems. It is, therefore necessary to have some specialist responsible to implement the scheme assisted with suitable subordinate staff. The Officer-in-charge will collect information regarding construction of suitable water channels or other irrigation system, which suits the needs of the farmers.

They will collect information from various Institute/Universities and make these available to the farmers through extension Staff. Besides this, the staff will be responsible for providing 50% subsidy on the purchase/construction of improved water irrigation system to the needy farmers.

Keeping the above in view a proposal to get required staff was submitted during 1991-92 but the request was not acceded to and it was desired that the work of this new scheme may be entrusted to the staff already available under I.A.D.P.

The Physical and approved financial outlay under the scheme are as follows :—

Physical

S. No.	Particulars	1992-93 (Hacts.)	1992-97 (Hacts.)
1.	Area to be covered for Installation/ Construction of improved Irrigation System/Channals	80	200

Financial

S. No.	Item of expdr.	Approved Outlay	
		(Rs. in lacs)	
		1992-93	1992-97
1.	Office Expenses	0.40	0.80
2.	Subsidy	7.60	24.20
	Total	8.00	25.00

14. Grant for Land Improvement, Production Inputs & Agricultural Implements (SCP)—(5. lacs)

The total population of U.T. Delhi as per census 1981 is 62 lacs as against 40.66 in 1971. The population of SC is near by 11.21 lacs comprising 15% of total population. Most of the SC people are either agriculture labour or engaged in service in urban areas. The Govs. of India in recent years have allotted cultivated land to the Harijans families in the five Development blocks of Delhi. The assistance under this

scheme was given to the SC farmers in the past years for land improvement, supply of production input and for the purchase of Agriculture implements. Almost all SC farming families have been saturated for the above scheme. Now it has been proposed having the approval of the Govt. of India, Ministry of Social Welfare, New Delhi vide their letter No. 11014/17/91-SCD. V dated 26-3-91 for giving assistance for the following items :

1. Chaff Cutter
2. Sprayer/Duster
3. Storage Bill

Under this scheme the assistance for Rs. 1500/- for one item has been proposed to be given to SC/ST candidate. To achieve the above mentioned objectives the Planning Commission has approved Rs. 5.00 lacs for VIII Five Year Plan and Rs. 1.00 lac for Annual Plan 1992-93. A target of 300 beneficiaries has been fixed for VIII Five Year Plan and 60 for Annual Plan 1992-93.

NEW SCHEME :

15. Popularisation of improved agricultural equipments—(Rs. 400 lacs)

Objective of the Scheme : The major objective of the scheme is to provide necessary technological support in the form of improved agricultural equipments essential for timely and efficient completion of critical farm operations. In the UT of Delhi, most of the agricultural operations have become mechanised. For preparation of the fields, almost the entire area is covered by tractors and power drawn agricultural equipments. Tillage operations by bullocks are completely out of practice. Even the small and marginal farmers in the UT of Delhi are not having bullocks and either they have to purchase their own tractors or get operations done on hire basis. The major objective of the scheme is to provide 50% subsidy to the small, marginal, and SC/ST farmers on the purchase of identified agricultural equipment which are generally available on high rates. The subsidy amount is to be shared by G. O. I. and Delhi Admn. on 50:50 basis.

Need & Justification : Agricultural operations related with field preparation and sowing are fully mechanised and harvesting threshing, cleaning, grading and transportation etc. are Semi-mechanised. Small, marginal and SC/ST farmers have to face difficulty in obtaining standard agricultural equipment as the prices of such standard agricultural equipment is very high. Most of the farmers have to depend on their own agricultural equipments to complete various farming operations. In most of cases the equipment is not upto the mark. In case, various agricultural operations are not performed properly in time, the production is affected adversely.

Keeping this in view, the Govt. of India has prepared a centrally sponsord scheme for popularisation of improved agricultural equipment with a view to provide subsidy @ 50% to small, marginal and SC/ST farmers subject to maximum limit of Rs. 10,000 per beneficiary on the purchase of identified items of improved agricultural equipments and the equipment costing less than Rs. 1,000 are not eligible for any

subsidy under the said scheme. As per letter No. 8.3.91-MY(AT) dt. 6-9-91 from Dy. Secy. to GOI, Ministry of Agriculture the expenditure towards subsidy will be shared between GOI and State Govt. on 50 : 50 basis.

The central grant under the scheme will be released on the basis of physical and financial targets for each year. The G.O.I. will bear 50% of expenditure towards subsidy. The financial assistance provided by the Govt. of India will not be utilised towards any other expenditure such as salary of staff, fabrication of equipment etc. The funds will be released after receipt of proposal from States/UTs.

Programme contents : The work under the scheme will be handled by existing staff of IADP under the supervision of Asstt. Agri. Engineer. Subsidy will be provided to the marginal farmers (with an irrigated area upto 1.25 acre or unirrigated area upto 2.5 acres) small farmers (having an irrigated area upto 2.5 acres and unirrigated area upto 2.5 acres) and SC/ST farmers of the UT of Delhi. Uniform subsidy @ 50% will be provided subject to a maximum limit of Rs. 10,000 per beneficiary on the purchase of identified items of improved agricultural equipments and the equipments costing less than Rs. 1,000 will not be eligible for any subsidy, under the scheme.

25% of subsidy will be met by the GOI under the abovesaid centrally sponsored scheme and the remaining 25% subsidy amount will be met by the UT of Delhi. The following equipment will be included for grant of subsidy :

S. No.	Name of equipment	Estimated Cost (Approx.) (in Rs.)
1.	Rota-vator (tractor mounted)	6000.00
2.	Seed-cum-fertiliser drill (power drawn)	9500.00
3.	Grain Planter (power drawn)	5000.00
4.	Potato Planter (tractor drawn)	4000.00
5.	Self propelled Rice Planter	25000.00
6.	Tractor mounted Reaper	20000.00
7.	Potato Digger (tractor drawn)	4000.00
8.	Power Operated Paddy Thresher	5000.00
9.	Power Operated Multi Crop Thresher	15000.00
10.	Power Operated-cum-Flower Thresher	5000.00
11.	Sprayers (Manual operated)	1500.00
12.	Sprayers (Power operated)	5000.00
13.	Duster	
	—Manual	1000.00
	—Power	4000.00

This is a new scheme formulated on the pattern of centrally sponsored scheme with the same objectives. Approval of GOI to the centrally sponsored scheme for 8th Plan is awaited. In case approval of Planning Commission for the centrally sponsored scheme is not received the same scheme will be surrendered.

*Starting date of execution of scheme :—*The scheme will be started during Rabi 92-93 and will be in operation during the 8th Five Year Plan in accordance with the approval of Planning Commission.

*Physical and Financial Targets :***(a) Physical**

S. No.	Particulars	1992-93 (No.)	1992-97 (No.)
1.	Subsidy to be given on identified improved agriculture equipment No. of agriculture equipment to be distributed.	780	900

(b) Financial

		(Rs. in lacs)	
		Requirement of Funds	
S. No.	Item of Expdr.	1992-93	1992-97
1.	Subsidy	2.00	4.00

Pattern of funding : As per centrally sponsored scheme the scheme is to run in collaboration with GOI and Delhi Admn. on 50 : 50 basis. As such 50% of amount of subsidy of agricultural equipment will be met by GOI and the remaining 50% expenditure of subsidy will be borne by UT of Delhi.

Pattern of Assistance approved by GOI : The scheme will be implemented in accordance with the pattern already approved under the centrally sponsored scheme of Popularisation of improved Agricultural Equipments as intimated vide letter dated 8-2-91 144(M) dated 5-9-91 from Jt. Commissioner (MY) Ministry of Agriculture Coop. GOI, Krishi Bhawan, New Delhi.

The approved outlay for the 8th Five Year Plan (1992-97) is Rs. 4 lacs which includes Rs. 2 lacs for 1992-93.

16. Strengthening of Planning & Statistical Cell H.Q.—(Rs. 1 00 lac)

Planning and Statistical Cell in Development Department was originally created at the Headquarter of the Development Department to assist the Development Commissioner for preparation, coordination, implementation of plan schemes and to help in monitoring the physical and financial results. With the passage of time, the work load has increased tremendously and this Cell has been burdened with the responsibilities of project identification, formulation, implementation of many schemes and issues of all expenditure sanctions of the Head of the Department. This Cell has also been saddled with the responsibility of overseeing the implementation of 20 point programme by the various functionaries and also the special component plan schemes. In the matter of 20 point programme and special component plan schemes, the planning and statistical cell not only collects the statistical data with regard to financial and physical achievements but also preparing analytic briefs for Development Commissioner. The Planning and Statistical Cell is required to prepare agenda notes and the briefs/minutes of the various meetings which take place at the level of Delhi Admn. as well as at the

level of Govt. of India. The Cell is also looking after the work relating to Metropolitan Council and the work of Parliamentary Committee. This Cell is also looking after the work 'Timely Reporting Schemes' which is a Centrally Sponsored Scheme. Now it is looking after the work relating to science and technology and environment sector which includes coordinating formulating and implementation of a number of plan schemes. In the 8th Five Year Plan, the following posts are required in the Planning and Statistical Cell :

S. No.	Name of the Post	No. of Posts	Pay Scale Rs.
1.	Dy. Director (Plg.)	1	3000-4500
2.	Reseach Officer	1	1640-2900
3.	Statistical Officer	1	1400-2300
4.	Stenographer	1	1200-2040
5.	L.D.C.	1	950-1500
6.	Peon	1	750-940
		6	

An outlay of Rs. 1.00 lac is approved for the Eighth Five Year Plan 1992-97.

NEW SCHEME :

17. *Monitoring Programme, Agricultural, Education and Training—(Rs. 3.00 lacs)*

The Agriculture wing which is the main coordinating unit of Agriculture, IADP, Hort. etc. does not have any statistical unit except for one Statistical Asstt. and one investigator, it is an established fact that statistics focus the basis for all future planning and past review. In the absence of the correct statistics both the planning and review suffer. In the light of this, it is felt that a separate statistical unit which would be better equipped and carry out the monitoring of ongoing plan/non plan scheme be set up.

Besides, the office is also entrusted with conducting the crop cutting experiments. These experiments are of very important nature as these form the basis of all kind of production estimates for the country. Even the Govt. of India lays quite an emphasis on these. In the absence of adequate staff the experiment solely depend upon VLWs and therefore, the degree of correctness is always questionable. Further the Govt. of India is planning to boring more crops under the purview of these experiments, which would require more staff. With the creation of this unit, the scope of the crop Insurance Scheme should also be enlarged, resulting thereby that more benefits would accrue to the farmers.

With these objectives in mind, it is proposed to create a separate Statistical Unit in Agriculture Unit comprising of the following staff :—

S. No.	Name of the post	No. of posts	Pay Scale
1.	Asstt. Director (Stats.)	1	2200-4000
2.	Research Officer (Stats.)	1	1640-2900
3.	S.A.S. (1)	1	1640-2900
4.	Statistical Asstt.	10	1400-2300
5.	Investigators	10	1200-2040
6.	Class IV	2	750-940
7.	Driver	1	950-1500

Planning Commission has also suggested that till the staff under the scheme is not created the work studies may be got completed through professional agencies. It was also suggested that implementation of Acts like Plant Production Act, Fertiliser Control Order, Seed Act, etc. An amount of Rs. 3.00 lakhs for VIII Five Year Plan and Rs. 1.00 lakh for Annual Plan 1992-93 has been approved for the implementation of the scheme. A study on Plant Protection Act would be completed during 1992-93 and all three would be undertaken during VIII Five Year Plan period.

18. Integrated Horticulture & Vegetable Development Programme—(Rs. 100.00 lacs)

The main objects of the scheme Integrated Horticulture Vegetable Development Programme are as under :—

1. The main object of the scheme to produce quality seeds, seedlings, plants etc. at various Govt. Seed Farm-cum-Nurseries and for further supply to the farmers of UT Delhi for promoting vegetables and fruit cultivation.
2. To motivate the farmers to adopt scientific technologies for growing vegetable and fruit crops and to increase the cropping intensity.
3. To popularise Potatoe and Onion cultivation to meet the requirements of vegetables and fruits to some extent in U.T. of Delhi.
4. To layout the vegetable demonstration plots on the farmers field to popularise the various varieties of different vegetable crops with improved technologies of cultivations.
5. To grow quality vegetable seeds/fruit plants and any other crops and give the farmer's on reasonable rates.
6. To organise training camps and to imparting training to house wives for preservation/crop cultivation and processing of fruits and vegetables.
7. To propagate different types of fruits, on the Govt. seed farm-cum-nurseries and supply to the farmers on reasonable rates. The technical information for raising healthy fruit plants will also be provided.
8. Technical know how regarding raising of various vegetable crops and fruits is given to cultivators. This is done through the field staff of the

Development Department. The benefits of this knowledge enables the cultivators to raise their vegetable crops and fruit plants economically and also to get higher returns per unit area. Training is also arranged through IARI so that major problems are sorted out in consultation with research workers. Technical Assistance and input packets would be supplied in urban areas to promote kitchen gardening activities.

9. Seed is one of the important input for good production and the object of this scheme is to grow quality seeds fruit saplings at Govt. Vegetables Seed Farms-cum-Horticulture Nurseries and make it available to farmers well in time from them and from other Govt. Nursery. Seed is one of the important input in whose availability the Agriculture Production depends. If proper seed is not sown all efforts put up by the farmers is wasted : so it is very essential that farmers production may not suffer. Development Department is endeavouring to provide this input of seeds so that production does not suffer and the farmers may get maximum production profit through seed. At present this office has three farm nurseries i.e. Baprola, Kharakhri Nahar and Masodabad.
10. This scheme involve in not only to educate and motivate the cultivations but also to arrange the supply of quality fruit plants from the Government Nurseries. This involves an element of subsidy viz @ .50% of the cost of fruit plants. Technical information for raising healthy fruit plants will be provided.

Apart from this some specific programmes are also the contents of the scheme :—

- (a) Area to be brought under vegetable production.
- (b) Area to be brought under specific vegetable production.
- (c) Vegetable seeds/seedling/production distribution.
- (d) Area under plant production.
- (e) Area under orchards.
- (f) Fruit plants planted.
- (g) Kitchen gardening development.
- (h) Total production seed crops-wise.
- (i) Plants multiplication (prepared of fruit saplings)
- (j) Total seedling production crops-wise.
- (k) No. of training camps to be organised.

Approved outlay for 8th Five Year Plan 1992-97 and Annual Plan 1992-93..

Total	1992-93		Total	1992-97 (Rs. in lacs)	
	Revenue	Capital		Revenue	Capital
30.00	20.00	10.00	100.00	88.00	12.00

The details of financial targets during the Annual Plan 1992-93 :—

Sl. No.	Name of the items	Rs. in lacs
1.	Salary of the staff	15.00
2.	T.A.	0.05
3.	Wages	0.05
4.	Demonstration plots	0.25
5.	Purchase of inputs for Horticulture Nurseries	2.50
6.	Purchase of seeds, fruit plants and seedlings/seplings	0.05
7.	Vehicles repair & P.O.L. Charges	0.50
8.	For machinery repairs/Electricity charges	0.25
9.	Office expenses and stationery items	0.50
10.	Packing materials	0.05
11.	Purchase of Horticulture implements	0.50
12.	Stipend for trainees	0.25
13.	Advertisement and publicity/literature etc.	0.05
		20.00

Capital Works :—Rs. 10.00 lacs constructions of seed store-cum-farm office as per estimates given by MID.

Staff required and sanction staff :—To implement the scheme more effectively and to get the desired favourable results, following staff is required :—

Sl. No.	Name of the Post	Pay-Scale	No. of Posts
1.	Dy. Director (Seed Production)	3000-4500	1
2.	Farm Superintendent	2000-3500	1
3.	Farm Manager	1640-2900	3
4.	Farm Assistant	1400-2300	3
5.	Administrative Officer	2000-3500	1
6.	SAS Accountant	1640-2900	1
7.	Vehicle Supervisor	1640-2900	1
8.	Tractor Driver	1200-2040	2
9.	Pump Operator	950-1500	3
10.	U.D.C.	1200-2040	2
11.	L.D.C.	950-1500	2
12.	Head Malies	950-1500	6
13.	Chowkidar	750-940	3
14.	Peon-cum-Messenger	750-940	2
15.	Labour	750-940	80
16.	Demonstration Officer	1400-2300	3
17.	Extension Officer	1400-2300	5
			121

19. *Soil Testing Lab.—(Rs. 8.00 lacs)*

*Object No. of the scheme :—*Soil testing is very important for the judicious use of fertilizers for getting optimum production per unit area and money invested. To provide soil testing facilities at nearest door is the only way for assisting farmers in better cultivation. The farmers can know the fertility status of soil and can use the balanced doses of fertilizers as recommended by soil testing laboratory for the crops intended to be grown by farmers. The objective of the scheme are :—

- (a) To analyse maximum number of soil samples and to intimate the fertility status of soil in respect of nitrogen, phosphorous & potash for the benefit of farmers.
- (b) To advise farmers for balanced use of fertilizers so as to get the optimum return per unit area.
- (c) To work out the solution for alkalinity & salinity problems of the area and to advise them for application of Gypsum and Ag. pyrite, if required.
- (d) To educate the farmers by way of soil testing & demonstration works for getting higher yields in comparison to the others packages of practices.
- (e) To analyse irrigation water of new tubewells as well as running wells so as to know about suitability of irrigation water for growing of even sensitive vegetable and other related crops.

The staffing pattern for lead soil testing lab. is given as under :—

S. No.	Name of post	Scale Rs.	No. of posts
1.	Dy. Director (Analysis)	3000-4500	One
2.	Asstt. Soil Chemist	2000-3500	One
3.	S.T.A.	1640-2900	One
4.	T.A.	1400-2300	One
5.	Service Engineer	1400-2300	Two
6.	Stenographer E/H	1200-2040	One
7.	U.D.C.	1200-2040	One
8.	L.D.C.	950-1500	One
9.	Lab. Asstt.	950-1500	One
10.	Driver (light vehicle)	950-1500	One
11.	Lab. Helper	750-940	Two
12.	Peon/Messenger	750-940	Two
13.	Watchmen/Chowkidar	750-940	Two

5. *Physical Targets are proposed during VIII Five Year Plan and Annual Plan during 1992-93 :*

S. Items No.	1992-93	1993-94
1. Soil Sample	5,000	6,000
2. Water Sample	1,000	1,000
Total	6,000	7,000

6. *Financial Target :*

	1992-93	1992-97
(a) Pay and Contengency	1.00	6.00
(b) Capital	1.00	2.00

The Scheme was not fully implemented due to paucity of staff & building. However, Rs. 2.30 lacs has been spent on contingencies & Rs. 4.88 lacs on capital for building of soil testing lab. in 7th Five Year Plan Period. This is a continuing scheme & will continue even during 8th Five Year Plan.

20. *Floriculture Production Programme—(Rs. 100.00 lacs)*

Since there is potential of growing ornamental plants/plants flower crops in U.T. of Delhi as it gives more income, more employment generation and join hands on environment improvement. The scheme for Floriculture production programme has been formulated with the following objectives :—

1. Production of quality cut flowers, quality house plants, bulbs and other ornamental plants.
2. To provide technical assistants, for the production of quality flower to rural youths.
3. To provide employment to unemployed skilled and semi-skilled rural youths.
4. To provide infrastructure facilities required for processing and storing of flowers and other ornamental plant material because individual farmers cannot afford such facilities.
5. To fatch attractive prices from foreign consumers in off season left over and plant material can be disposed off in the internal market.
6. To produce quality flower seeds and plant material required by the farmers.
7. Research and development i.e. conducting experiment on multiplication of seeds, seedlings and cuttings etc. at departmental farms/nurseries.
8. To lay out the demonstration of floriculture crops to popularise the programme amongst growers.
9. To organise the training course, for the horticulturists and farmers on flower production technology.

Budget Proposal :—A sum of Rs. 100 lacs Rev. 95+ Capital 5 lacs is approved for the VIII Five Year Plan (1992-97) and (Rev. 18.00+ Capital 2.00 lacs) is approved for the Annual Plan 1992-93. The details of the items for expenditure during 1992-93 is as under :—

Revenues :

	lacs
1. Salary of staff	17.00
2. Purchase of nursery inputs/ Tempo/any proposal suggested by administration	1.00
	<u>18.00</u>

Capital Works

Rs. 2.00 lacs constructing nursery shed-cum-store, boundary wall/fencing barbed wire, installation of mist unit and installation of tubswell as per estimate given by M.I.D. or any alternative proposal given by administration.

Physical targets proposal for 8th Five Year Plan (1992-97) and year-wise break up is prepared as under :—

(A) *Extension for ornamental plants/flower crops :*

S. No.	Name of the item	Unit	1992-93 (Target)	VIII Plan 1992-97
1.	Roses	Hectare	180	1120
2.	Gladiolus	"	120	760
3.	Tuberose	"	90	580
4.	Chrysenthemum	"	80	640
5.	Carnation	"	40	240
6.	Misc.	"	100	650
			<u>610</u>	<u>3990</u>

(B) *Production of plants material through Departmental Nurseries :*

	1992-93 lac	VIII Plan 1992-97 lacs
1. Ornamental plants/tree asplings	1.00	5.00
2. Ornamental bulbs plants	0.10	0.50
3. Misc. plant material of other than the above	1.00	6.00

Staff requirement :—This job is of a highly technical nature and involved the service of the experts of the field. The following staff is required for successful implementation of the scheme :

S. No.	Name of the post	No. of posts	Pay-scale (Revised) Rs.
1.	Dy. Director (Floriculture)	1	3000-4000
2.	Asstt Director (Flor.)	3	2000-3500
3.	Asstt. Floriculturist	1	1640-2900
4.	Section Officer (Flor.)	10	1400-2300
5.	Technical Asstt. (Glass house)	1	1400-2300
6.	Head Clerk	1	1400-2300
7.	SAS Accountant	1	1640-2900
8.	UDC/Asstt.	2	1200-2040
9.	LDC	3	950-1500
10.	Typist	1	950-1500
11.	Stenographer	1	1400-2300
12.	Peon	2	750-940
13.	Chowkidar	4	750-940
14.	Messenger	1	750-940
15.	Head mali (Head gardener)	6	950-1500
16.	Malies (Gardener)	10	750-940
17.	Driver	3	950-1500
18.	Labourer	90	750-940
		<hr/> 141 <hr/>	

21. Horticulture Training Centre for Malies—(Rs. 20 lacs)

Objectives of the scheme :

1. The centre will provide training to officials like Malies, Chowdhary, Supervisors, Section Officers and Horticulture Assistant etc. working under the various department agencies.
2. To provide training to unemployed candidates who are interested in horticulture.
3. To arrange vocational training for house-wives and amateur gardeners/professionals.
4. To arrange demonstration cum training for horticulturists engaged in commercial horticultures.
5. To arrange exhibition, shows of floors and house plants for the completion.
6. To make the general public well aware of environmental pollution problems.

It was necessary to start the school of Horticulture in Union Territory of Delhi in order to provide practical training to all gardeners. Accordingly, Delhi Admn. submitted a project report to Govt. of India, Ministry of Agriculture and Planning Commission for according/technical approval of the project. The Planning Commission and Ministry of Agriculture has advised Delhi Administration that the name of the Institute may be changed to Horticulture Training Centre, Delhi and same has been done in 8th Plan.

Budget allocation :— Rs. 20 lacs (Rev. Rs. 17.00+3.00) is approved for VIII Five Year Plan (1992-97) and Rs. 5.00+2.00 is approved for the Annual Plan 1992-93. The details of the items for expenditure during 92-93 is as under :—

Revenue

S. No.	Name of items	Amount (Rs. in lacs)
1.	Salary of the staff	4.75
2.	Electric & POL charges	0.10
3.	Purchase of inputs for H.T.C.	0.10
4.	Misc. items and repair of engine etc.	0.05
		5.00

Capital :—Rs. 2.00 lacs for constructing a boundary wall, restoration of roof, installation of tubewell etc.

Physical targets proposed for VIII Five Year Plan (1992-97) and year-wise break up is as under :—

S. No.	Name of item	VIII Five Year Plan 1992-97	1992-93
1.	Training course for malies	600	120

The following staff is required for smooth functioning of the scheme :

S. No.	Name of Post	No. of Posts	Pay-scale (Revised) Rs.
1.	Principal	1	3000-4500
2.	Landscaps Specialist	1	2000-3500
3.	Horticulturist	1	2000-3500
4.	Plant Protection Specialist	1	2000-3500
5.	Demonstrator	3	1640-2900
6.	Fieldman	2	1200-2040
7.	Stenographer	1	1400-2300
8.	U. D. C.	1	1200-2040

9. L. D. C.	1	950-1500
10. Driver	1	950-1500
11. Driver/Mali	3	750-940
12. Peon	1	750-940
13. Draftsman	1	750-940
14. Chowkidar	1	750-940
15. Labourer	25	750-940
	44	

22. *Development Community Parks and Gardens in Harijan Basties/Villages of Delhi—*
(Rs. 150 lacs)

The following aims and objective are prescribed :—

Need and justification :

1. To improve the ecological balance of the area.
2. To protect community land/Govt. land from the land grabbers.
3. To improve general condition of sub urban/rural areas from pollutions.
4. To provides fuel, fodder and fruits to the residents.
5. To beautify the hither to ugly looks of the sub urban/villages areas.
6. To provide places for walking, studying, meditation and picnic etc. to the residents.
7. To provide employment to un-employment rural youth.
8. To attract general mass towards the tree plantation through commemorative tree plantation.
9. To provide commercial wood to the villagers.
10. To improve the environmental conditions of developing colonies of villages.

Contents of the programme :—The scheme will be implemented in all the Five Community Development Blocks of U. T. of Delhi with the following mentioned strategy.

1. Development of community parks by planting fruit plants.
2. Development of community parks by planting trees of esthetic and commercial wood value.
3. Awareness towards tree plantation by motivating the common man for planting a tree.

Plan allocation for the Annual Plan 1990-91 and 1991-92 and year-wise achievement.

OUTLAY AND EXPENDITURE

(Rs. in lacs)

S. No.	1990-91 Budget	Expdr.	1991-92 Budget	Expdr.
1.	25.00	—	58.36	36.39

Budget proposal :

A sum of Rs. 150 lacs (Revenue 100+Capital 50 lacs) and 41.00 lacs (Revenue 11+Capital 30.00 lacs) is approved for the 8th Five Year Plan (1992-97) and Annual Plan for the year 1992-93 respectively. The details of the expenditure to be incurred during 1992-93 will be as under :—

REVENUE :

Sl. No.	Name of items	Amount (Rs. in lacs)
1.	Development and improvement of land by filling up of earth, supplying manure and fertiliser and garden tools etc.	0.50
2.	Grassing, planting shrubs and trees etc.	0.10
3.	Provision for misc. items like transportation charges, various plantation ceremonies and other unspecified contingent items.	0.50
4.	Staff (Salary+Wages)	9.00
5.	Plant sapling for tree distribution for institution and other common places.	0.10
6.	Misc. sundries including soil amendment tree guards repair fencing, repair of tubewells/hand pumps and other misc. items like hose pipe, irrigation pipe line and others related fitting etc.	0.75
7.	Misc. exp. like liveries C. F. A. cycle allowances etc.	0.05
	Total	11.00 lacs

CAPITAL :

S. No.	Name of items	Amount Rs. in lacs
1.	Provision of boundary wall railing installation of tubewalls, hand pumps laying of irrigation pipe line, temporary stores and path way/roads in parks and garden.	30.00

Physical targets proposals for 8th Five Year Plan (1992-97) and year-wise break-up is prepared as under :—

S. No.	Name of items	Unit	1992-97	1992-93
1.	Development of community like Sariti Vatika.	Acres	500	100
2.	Maintenance of community parks and Amriti Vatika	-do-	500	100
3.	Hetivation for tree plantation to insitutions as wall as public.	-do-	400000	60000
4.	Free sapling distribution for common places	-do-	20000	40000

Staff requirement :—The requirement of staff will be as per the Central Public Works Department norms and the details of which are as under :—

1.	Dy. Director (Hort.)	1	3000-4500
2.	Asstt. Director (Hort.)	5	2000-3500
3.	Hort. Assistant	20	1400-2300
4.	Head Clerk	1	1400-2300
5.	Divisional Accountant	1	1640-2900
6.	Auditor	3	1200-2040
7.	U. D. C.	4	1200-2040
8.	Draftsman Gr. II	1	1400-2300
9.	L D. C.	3	950-1500
10.	Stenographer	1	1400-2300
11.	Driver	3	950-1500
12.	Peon	6	750-940
13.	Peon-cum-messenger	2	750-940
14.	Chowkidar	20	750-940
15.	Sweeper	20	750-940
16.	Daftri	1	775-1025
17.	Head Malies	20	950-1500
18.	Senior Malies	50	775-1025
19.	Labourer/Malies	500	750-940

N. D. M. C.

In the Working Group discussion on Agriculture and Allied activities on 8th Five Year Plan 1992-97 and Annual Plan 1992-93 proposals, the N. D. M. C. representatives assured the working group that outlay of Rs. 44.00 lacs is required to complete the following schemes and future maintenance will be done under Non-Plan :

S. No.	Name of scheme	Approved outlay 8th Five Year Plan 1992-97	Annual Plan 1992-93
(Rs. in lacs)			
1.	Washing & Pruning of Trees	5.00	5.00
2.	Sprinkling system at Central Vista Lawn	7.00	7.00
3.	Sprinkling system of Nehru Park	7.00	7.00
4.	Stg. of Nursery and glass house at Lodhi Garden	7.00	7.00
5.	Stg. of Plant protection cell in N. D. M. C.	5.00	5.00
6.	Improvement in the Mechanisation system in Horticulture Deptt.	7.00	7.00
7.	Plantation of Trees	6.00	6.00
Total :		44.00	44.00

23. *Washing and Pruning of Trees—(Rs. 5.00 lacs)*

The scheme is one of the few schemes of Horticulture Deptt. in the 7th Five Year Plan. The main objects of this scheme is to protect and wash out the junk carbon on the leaves and stems of that trees and in balance condition. It is a modern scientific technique to wash out the big trees like a natural rain other than the monsoon season. Due to this procedure the leaves and stems of the trees not only looks fresh but also increases the life of such tree. The continuation of this scheme will prove a boom to reduce the day by day increasing air pollution of the Delhi, the heart of country and the Capital of India. For the implementation of this scheme, the following shall be essentially required :

1. Insecticides and pesticides to give nutrition to the trees and avoid diseases/damages to the plants.
2. Staff components like Drivers, Helpers will also be covered under this scheme to operate the tankers and other machines.
3. Entire equipments of machine spray, parts etc. will also be required to keep the machine and equipments in working condition.
4. Pruning machines.

To implement this scheme, the following staff which is essentially required was also proposed :—

S. No.	Name of the Post	Scale Rs.	Group	No. of Posts required	
				During the 8th Five Year Plan (1992-97)	During Annual Plan (1992-93)
1.	Driver	(1350-2660)	C	2	1
2.	Helper/Malies	(750-940)	D	5	3
3.	Chowkidar	(950-1560) (S S)	D	22	1

For Annual Plan 1992-93 an allocation of Rs. 5 lacs has been made.

24. *Sprinkling System at Central Vista Lawns—(Rs. 7 lacs)*

It is mentioned that about 181 acres area of prestigious Central Vista Lawns have been transferred from CPWD to NDMC in the year 1985 with a view that the maintenance standard of the NDMC is far better than the CPWD. The Central Vista Lawns on both sides of Rajpath are of vital importance. These lawns are situated in the heart of Delhi the Capital of India from where several V.V.I.Ps. foreign dignitaries diplomats, Heads of States on State tour to India, etc. passes very frequently. Thus the lawns of Central Vista have great importance of national as well as international level.

Irrigation of lawns to keep them in green position is very essential. At present the Hort. Deptt. of NDMC is irrigating the Central Vista Lawns through old method i.e. rubber hose pipe. This method of water delivery by rubber hose pipe is not only an old method of irrigation but also uneconomical and unattractive for the lawns like Central Vista. Due to the existing method of irrigation our department has to face problems like leakage of water, deployment of more staff, flowing of unchecked water inside the lawns handling of rubber hose pipe etc.

To control and check all such type of nuisance, it was proposed to adopt modern and scientific method of irrigation through sprinkling system particularly for the lawns like central vista. This sprinkling system of irrigation adopting this method in the central vista lawns will :—

1. increase the attraction of the prestigious lawns in the wide interest of public and international level.
2. Control and check all the nuisance of the old method of irrigation through water delivery rubber hose pipe.
3. Scientific and modern method of irrigation will be very useful.
4. Minimise the labour fatigue, labour cost and time.
5. Useful for proper and smooth irrigation to keep the lawns in green even during the summer season.

In sprinkling water system proposed to be installed at central vista lawns, the following components are essential :—

1. Underground chain of pipe will be laid down
2. Installation of tubewells (six)
3. Fixing of control wall
4. Providing of valves and misc. fittings
5. Staff component as mentioned under :—

S. No.	Name of Post	Scale Rs.	No. of Posts
			During 8th Five Year Plan (1992-97)
1.	Pump Driver	(1200-1860)	4
2.	Fitter Gr.-II	(950-1500)	2
3.	Khallasi	(950-1560) (SS)	2
4.	Pump Mechanic	(1640-2750)	1
5.	Chowkidar	(950-1560) (SS)	1

An estimate amounting to Rs. 24,87,750/- has already been approved by the Committee but due to insufficient and meagre allocation of Rs. 7 lacs during the current financial year the progress for partial laying of pipe line is likely to be hampered.

25. *Sprinkling System at Nehru Park—(Rs. 7.00 lacs)*

Nehru Park is one of the prestigious parks/gardens being maintained by the Hort. Deptt. of N.D.M.C. having 90 acres of area. Nehru Park is surrounded by diplomats colony like Chanakya Puri where several countries have their Embassies and High Commissions, Ashoka Hotel, V.V.I.Ps route etc. Moreover, Nehru Park is the garden which has won so many prizes in the garden competitions organised by the C.P.W.D. and other organisations time to time. At present the method of irrigation in the Nehru Park is by water delivery rubber hose pipe which is quite an old method due to which the department has to face many problems maintaining the park upto the highest mark like :

1. wastage of water by leakages.
2. more labour cost and fatigue and time.
3. handling of rubber hose pipe, etc.

It was therefore, proposed to lay sprinkling water system in Nehru Park which will not only invite the attention of the public, visitors but also will be very helpful in proper and smooth irrigation of the entire lawns of the prestigious parks. A small portion of Nehru Park has already been provided with auto-sprinkling system at a cost of Rs. 3.38 lacs.

The following are the main features which have to be covered in implementing the auto sprinkling water system in Nehru Park :—

1. Laying of underground lines through-out the park.
2. Installation of tubewells.
3. Fixing of central walls and providing of valves and misc. fittings.
4. Staff components as mentioned below :—

S. No.	Name of Post	Scale	No. of Posts During 8th Five Year Plan 1992-97
1.	Pump Driver (Rs. 1200-1860)		4
2.	Fitter Gr. II (Rs. 950-1500)		1
3.	Khallasi (Rs. 950-1560) (SS)		1
4.	Pump Mechanic (Rs. 1640-2750)		1

The Approved Outlay for 1992-93 is Rs. 7 lacs.

26 *Strengthening of Nurseries and Glass House at Lodhi Garden—(Rs. 7.00 lacs)*

At present there are only three departments nurseries in the Horticulture Department. The main purpose of these departmental nurseries are to make available plants for the Hort. Deptt. There is only one Glass House Nursery at Lodhi Garden which maintains the temperature for the rare and costly plants as well as the rare plants purchased from outside Delhi like Bangalore etc. Although the area and the activities of the Hort. Deptt. has increased extensively due to addition of the area of Central Vista Kutch Road berms, road side tree plantation etc., yet nurseries have remained constant without any change or extension. Therefore, these three existing departmental Nurseries are quite inadequate to fulfil the requirement of department. Horticulture Deptt. has at present no facility for mist propagation of rare plants. The preserving facilities available at present are not adequate for the plants which are very rare and require special temperature attentcn. In addition to this the Horticulture Deptt. of NDMC which is maintaining the entire VVIPs route and area, the department has very limited garden features. For example department has no Cactus House, Orcharium House etc.

In addition to above the following staff components are essentially required :—

S. No.	Name of Post	Scale	No. of Posts During the 8th Five Year Plan (92-97)
		Rs.	
1.	Section Officer	1400-2300	—
2.	Choudhry	950-1400	1
3.	Mali	750-940	4
4.	Sr. Mali	775-1025	1
5.	Chowkidar	950-1560	1

6. Pump Driver	1200-1860	1
7. Khallasi	950-1560 (SS)	1
8. Fitter	950-1500	1
9. Driver	1350-2660	—

The following works were proposed to be undertaken under this scheme :

1. Creation of Cactus House and Glass House
2. Strengthening of facilities provided at present for the tree plantation, mist propagation, maintaining temperature for rare plants.
3. Knowledge to the staff about the tree plantation.
4. Enable the department to meet its requirement through their own departmental nurseries instead of depending upon the local nurseries/markets.

During the Annual Plan 1992-93 an allocation of Rs. 7.00 lacs has been made.

27. *Strengthening of Plant Protection Cell in NDMC—(Rs. 5 lacs)*

Horticulture Department of NDMC has at present no proper arrangement about the plant protection. As there is a large area which comes under the jurisdiction of the Hort. Deptt. of NDMC and the number of trees, plants, shrubs increasing day by day due to huge plantation programme it has become essential for the deptt. to have its own plant protection cell. This cell should have all the equipment insecticides, pesticides and staff to control and check various diseases of the plants and protect the greenery of the New Delhi area. Following are the components which are essentially required for this scheme:—

1. Technical know-how to the staff;
2. Arrangement of pesticides;
3. Arrangement of plant protection equipment and;
4. Enforcement of insecticides Act, 1968;
5. Strengthening of existing plant protection measures;
6. Staff components as mentioned below :

S. No.	Name of Post	Scale Rs.	No. of Posts
			During the 8th Five Year Plan (1992-97)
1.	Tech. Asstt.	1400-2300	1
2.	Peon	950-1560 (SS)	—
3.	Driver	1350-2660	—
4.	Mali	750-940	3

During the Annual Plan 1992-93 an allocation of Rs. 5 lacs has been made.

28. *Improvement in the Mechanisation System of Hort. Deptt.—(Rs. 7.00 lacs)*

The Hort. Deptt. of NDMC is maintaining a huge area which come under the jurisdiction of NDMC. This area has increased considerably viz. Central Vista Lawns, road berms, etc. due to which work load has also increased. Most of the area maintained by Hort. Deptt. is of VVIP. Various foreign dignitaries, Heads of States passes frequently through NDMC area. Thus the entire area requires special attention for the maintenance and thorough supervision over the staff. In order to strengthen and smooth the working of Deptt. the following was proposed under the aforesaid new scheme out of the plan funds :—

1. Replacement of old water tankers
2. Purchase of DCM Toyota
3. Purchase of operational vehicles
4. Purchase of hand driven ladders

At present the deptt. is having very old water tankers which sometimes reflects badly. Besides this the existing water tankers are quite inadequate to meet the requirement of the two divisions and eight sub-divisions of the Hort. Deptt. Moreover at present the deptt. is not having any operational vehicles in absence of which the deptt. feels difficulty in supervising the work. Apart from this, the Hort. Deptt. has to decorate various V.I.P. routes, floral decoration and to provide floral arches, gates, etc. during the visit of foreign dignitaries, functions-seminars conferences etc. organised on national and international level from time to time for which the department has to request each and every time to the Elect. Deptt. The department has no arrangement for the same. The following staff component is essentially required :—

S. No.	Name of Post	Scale	No. of Posts During the 8th Five Year Plan (1992-97)
1.	Driver	1350-2660	2
2.	Helper	750-940	2

During the Annual Plan 1992-93 an allocation of Rs. 7.00 lacs has been made.

29. *Forest : Plantation of Trees in NDMC Area—(Rs. 6 lacs)*

This is a critical ongoing scheme of the 7th Five Year Plan.

Tree plantation is one of the best way to reduce the day by day increasing pollution and improve the environmental conditions. The main objects of this scheme is to plant trees of different varieties throughout the NDMC area including roads, etc. One of the main features of this scheme is gap plantation and second generation tree

plantation of various roads, schools, lanes-by-lanes, parks, gardens, residential colonies etc. For the implementation of this scheme, following components are essential :—

1. Operational vehicles to keep a close eye on the entire plantation programme.
2. Different varieties of trees, shrubs, etc.
3. Water tankers/tempo to facilitate the irrigation for the newly planted trees and improve its survival percentage.
4. To provide temporary barbed wire fencing and tree guards wherever required to protect the newly planted trees from stray cattle and public.

In addition to this the following staff components which is required for the effective implementation of this scheme also proposed :—

S. No.	Name of Post	Scale	No. of Posts During 8th Five Year Plan (1992-97)
		Rs.	
1.	Section Officer	1400-2300	1
2.	Chaudhary	950-1400	2
3.	Malies	750-940	50
4.	Drivers	1350-2660	2

During the Annual Plan 1992-93 an allocation of Rs. 6.00 lacs has been made.

(B) Agricultural Marketing & Quality Control

Though Delhi is not a producer of agricultural commodities in bulk, it is a big distributive/consumption centre and hence the trade in agricultural commodities needs to be regulated.

In order to streamline Agricultural Marketing this Directorate administers the Delhi Agricultural Produce Marketing (Regulation) Act, 1976 and Agricultural Produce (Grading & Marking) Act, 1937. The Delhi Agricultural Produce Marketing (Regulation) Act, 1976 came into force w.e.f. 5th November, 1976. This Act provides for the regulation of agricultural commodities pertaining to :—

1. Animal Husbandry Produce
2. Apiculture
3. Cattle feeds
4. Cereals
5. Condiments, spices and others
6. Fibres
7. Fruits
8. Grass and fodder

9. Gur, Sugar, Sugarcane, Khandsari, Shakkar and Rashkat
10. Narcotics
11. Oil Seeds
12. Pisciculture
13. Pulses and
14. Vegetables

The Delhi Agricultural Produce Marketing (Regulation) Act, 1976 is intended to ensure that the regulated markets function on the most model and scientific lines, providing therein the latest and up-to-date infrastructural facilities by the Market Committee for the benefit of producers and the traders. It is also envisaged that the new markets on these lines are also established and developed to cover all the commodities given in the schedule under the Act.

The Directorate of Agricultural Marketing is responsible for the implementation of the following schemes :—

1. Regulation of Markets & Market Practices;
2. Grading at Producers' Level;
3. Training of Personnel in Agricultural Marketing;
4. Integrated Scheme for the Improvement of Market Intelligence;
5. Strengthening of Head Quarter;
6. Promotion of Grading of Agricultural Commodities under 'AGMARK';
7. Setting up of E.D.P. Cell.

As Planning Commission has allocated only Rs. 15.00 lacs for 8th Five Year Plan the following three schemes have been included under 8th Five Year Plan and rest of the schemes would continue under Non-Plan Head only :—

30. *Regulation of Markets & Market Practices—(Rs. 8.90 lacs)*

So far, the following markets have been brought under regulation of Delhi Agricultural Produce Marketing (Regulation) Act, 1976 :—

S. No.	Name of the Markets	Items
1.	APMC, Azadpur, with subsidiaries markets at Shahdara, Jheel Kurenja, Okhla and Tilak Nagar (Chaukhandi)	Fruits & Vegetables
2.	APMC, Narela	Foodgrains & Cereals
3.	APMC, Najafgarh	Foodgrains & Cereals
4.	APMC, Shahdara	Foodgrains, Cereals, Sugar, Khandsari & Gur.
5.	APMC, Zakhira with subsidiaries markets at Nangloi Asharm and Najafgarh.	Fodder
6.	Fish, Poultry & Egg Market Jama Masjid	Fish Poultry & Egg

Before a market is regulated, there is a need to have a thorough survey of the concerned market.

As per the provision of the Delhi Agricultural Produce Marketing (Regulation) Act, the first Committee is always nominated by the Administrator and subsequent Committees are required to be constituted by election. Under Section 12 of the Act, the Superintendance, direction, and control of all such elections of Market Committees vest in this Directorate. Section 9 of the Act provides that out of 14 members which is composition of a Committee, 6 members are to be elected from Agriculturists, residing in the market area and having agricultural land in the Union Territory of Delhi. So far a regulated market like Azadpur, Zakhira, Najafgarh, Narela, Shahdara and the newly regulated market of Jama Masjid, the electorate is to the tune of Mini-General Election and hence the volume of work can easily be assessed. For malfunctioning, the elected Committee can be superceded and for other reasons too. As the terms of offices of such Committees differ from each other, so the exercise becomes a routine one for this Directorate. As now the elections are to be held shortly for all the regulated markets, necessary arrangements for voters' list and other allied matters will have to be made before hand. For this purpose additional staff will be required.

At present the following five regulated Agricultural Produce Market Committees are superceded. The details of the supersession of the Market Committees are as under :—

S. No.	Markets	Date of Supersession
1.	Najafgarh	3-10-80
2.	Narela	27-12-80
3.	Shahdara	2-12-80
4.	Azadpur	31-7-78
5.	Zakhira	5-9-80

The sixth Market Committee of Jama Masjid has recently been constituted.

With the changed situation, it is now felt to pave a democratic way for these committees by elections. The holding of elections to these Markets Committees is a gignatic task. Under the Delhi Agricultural Produce Market (Regulation) Act, 1976 Election Rules, framed thereunder, election procedure is incumbersome and costly because of direct elections of the members of the Market Committee.

Even in the year 1983, the then executive councillor has given assurance in the metropolitan council for the early election of Market Committees.

Section 61 of the Delhi Agricultural Produce Marketing (Regulation) Act, 1976 empowers the Joint Director, Marketing Officer and Inspectors of this Directorate to monitor any information or return relating to agricultural produce from any trader, any Market Committee, any godown keeper, any market functionary. They have also been empowered to inspect records and books of accounts of these aforesaid functionaries of Market Committees.

To keep a close watch over the affairs of the Market Committee under this Act, the following staff are required :—

1. Inspector Gr. II	1400-2300	2
2. Driver	950-1500	1

These posts would be created during 1993-94 and will continue during the 8th Five Year Plan.

A Jeep would be purchased for the mobility of the staff for effective control over the markets. A token provision of Rs. 1.00 lac is proposed for holding of Elections of Agricultural Produce Market Committee (APMC) during 1992-93. In all, an amount of Rs. 1.00 lac for 1992-93 and Rs. 8.90 lacs for 8th Five Year Plan is approved with the year-wise break-up as follows:—

	92-93	93-94	94-95	95-96	96-97	Total
Pay & Allowances	—	1.10	1.15	1.25	1.40	4.90
Vehicle	—	1.50	—	—	—	1.50
Election Expenditure/Contingency	1.00	0.30	0.35	0.40	0.45	2.50
Total	1.00	2.90	1.50	1.65	1.85	8.90

31. Training of Personnel in Agricultural Marketing—(Rs. 1.25 lacs)

The Scheme aims at imparting training to the service personnel in Agricultural Marketing so that effective services could be rendered to the Agriculturists/Producers/Purchasers. Officers/Officials of this Directorate are being sponsored for various technical courses conducted by the Government of India, Directorate of Marketing and Inspection from time to time. No post under this scheme is proposed to be created. An outlay of Rs. 1.25 lacs is required for payment of T.A. & D.A. and fee for training from this Directorate during 8th Five Year Plan out of which Rs. 0.25 lac is approved for the year 1992-93.

32. Setting up of E.D.P. Cell—(Rs. 4.85 lacs)

It is proposed to establish an Electronic Data Processing Cell for computerising the Agricultural Marketing Data pertaining to daily commodity-wise arrivals and their prices prevailing in the six wholesale regulated markets as well as comparative wholesale and retail prices prevailing in the unregulated markets.

Besides, we have data on prices for the past ten years. As such with the setting up of a Data Bank it would be easier to have a close study of price trend in the coming years. It will help in analysing the various factors responsible for irregular time series of prices.

The information profiles of the markets will also be prepared with the help of computer printer which is proposed to be purchased during 1992-93. The following staff will be required for this cell :—

1, Data Entry Operator (Rs. 1200-2040)	1
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An amount of Rs. 2.75 lacs is approved for this scheme under Annual Plan 1992-93 and Rs. 4.85 lacs for the 8th Five Year Plan 1992-97. Break-up of the same is given below :—

Items	1992-93	8th Plan
Pay & Allowances	0.10	2.00
Office Expenditure	0.05	0.25
Purchase of Computer with Printer & other Accessories	2.00	2.00
Air Conditioner for Computer Room	0.60	0.60
Total	2.75	4.85

33. C. Soil Conservation—(Rs. 10 lacs)

Objective of the Scheme :—In the Union Territory of Delhi except Kohi region which falls in South Delhi of Mehrauli Block, the soil of all the other regions are affected by alkalinity or salinity. Some soils are water logged in “KOHI” region.

Under the scheme, soil and water samples are drawn from the farmers field and from their water resources points like tubewells, wells etc. and same are get tested at Soil Testing Laboratory, Najafgarh to check the adverse effect of salts present in the soil and water & modern agronomical practices are being recommended to the cultivators.

Therefore the affected field are being identified & provided various inputs and agronomical practices. Apart from this deptt. is to encourage the farmers towards the recommendation doses of fertlizers used by them. The soil amendments along-with agriculture production inputs are also supplied free of cost to farmers for demonstration purposes.

The farmers are advised to take up plantation and plantation will also be done by the Deptt. on Govt. water logged lands.

4. *Programme Contants* :—The main contants of the programme are as under :

	(Rs. in lacs)
(a) Office expenses & Stationery and Demonstration Materials	8.50
(b) P.O.L. and repair of vehicle & Audio Visual equipment aid & civil works	1.50
	10.00

The following staff have been proposed during the current Five Year Plan :—

		Rs.
Soil Conservation Asstt.	2	1400-2300
Driver	1	950-1500

Year-wise physical targets and achievements for the 8th Plan are given below :—

S. No.	Item	Units	1992-97	1992-93
1.	Soil Sample	Nos.	32,000	5,000
2.	Water Sample	Nos.	5,000	1,000
3.	Afforestation of water logged area	Hec.	100	20
4.	Free demonstration	Nos.	1000	200
5.	Plots financial	Lacks	10.00	2.50

The following financial targets are approved during 1992-23 and 1992-97 :
(Rs. in lacs)

S. No.	Items	1992-93	1992-97
1.	Salary	1.50	2.50
2.	Contingency	1.50	7.50
	Total :	<u>3.00</u>	<u>10.00</u>

D. Forests

34. *Plantation of Trees—(Rs. 405 lacs)*

Delhi is a small Union Territory, but unlike other cosmopolitan cities it has a sizeable rural belt if number of factories industries and vehicle on the road is also larger than any other city of India. Population influx is regular and ever increasing. These have resulted into degradation of environment, which is worsening every day. It has already reached saturation to be reserved for the very survival of life. Apart from other preventive measures trees play a crucial part in environmental and pollution control because one tonne of live timber inhales 1.5 tonnes of CO₂ and enhales one tonne of Oxygen. As such we can not find better purifier of atmosphere on such a large scale. Hence, immediately need to plant more trees on every available land along road sides, drains, bunds railway tracks, panchayat & Govt. waste lands and Forest etc.

Under the scheme localized nurseries have to be set up for raining planting stock. Seeds of different species have to be collected as and when these ripen. These have then to be planted out or sown at different sites. These have then to be tended for a period of first two years when these got fairly established to require much further after care other than protection and watch and ward. Re-stocking has also to be done during the winter season. All these operations have to be carried out with precision according to a time schedule.

During the year 1990-91 expenditure was 100 lacs in Revenue and 4.95 lacs in Capital outlay against approved outlay of Rs. 117 lacs.

Following contingent of new posts under this scheme in the VIII Five Year Plan are required :—

Dy. Conservator of Forests	3000-4500	1
Asstt. Conservator of Forests	2000-3500	1
S.A.S. Accountants	1640-2900	3
Forest Ranger	1400-2300	4
Computer Programmer	1640-2900	1
UDCs	1200-2040	2
Dy. Forest Ranger	1200-2040	6
Draftsman-cum-Tracer	1200-2040	1
LDCs	950-1500	5
Mechanic	1200-2040	1
Messenger-cum-Dak Runner	750-940	2
Peons	750-940	5
Labourers	750-940	106

This work is labour oriented & more than 85% expdr. will be on labour which will generate labour employment for weaker section of the society during the year. 724 regular posts of labourers have already been created out of 870, 140 posts are to be created.

Tools, implements, small machinery and installation for workshop are essential items for afforestation programme. Hence, their provision in the Annual Plan and VIII Plan. Boundary Wall of some forest areas is also required their provision. Fencing has also been kept during the VIII Five Year Plan. Details of anticipated expenditure during the VIII Five Year Plan, is as follows :

Capital allocation will be utilised for the construction of Boundary Wall at S./R. Nursery, Office premises and other nurseries of the Unit.

For the implementation of the scheme following vehicles are also proposed and provision in VIII Plan has been kept :—

		Physical Targets	
		92-93	92-97
1. Trucks	5		
2. Water) Tankers)	3		
3. Tractor	3	10.00	50.00
4. Jeep	2	Lacs Trees	Lacs Trees

The approved outlay for the year :

92-93			92-97		
Rev.	Cap.	Total	Rev.	Cap.	Total
128.50	5.00	133.50	390	15	405

- | | |
|--|--------|
| 1. Salary & Wages | 124.50 |
| | 4.00 |
| 2. Contingencies : | |
| (a) Trolly for Tractor (4) | |
| (b) Water Tank), | |
| (c) Polythene Bags-2000 Kgs. | |
| (d) Water Tanker-3 | |
| 3. Grant-in-aid for Bhatti Mines Restoration-Technology Development. | |
| 4. Construction of Lab. through Irrigation & Flood Control Deptt. Residence of Head of Forest Office alongwith supporting staff as measure of proper management of Forest. | |

35. "Strengthening of Wildlife Section"—(Rs. 10 lacs)

Wildlife is an integral part of environments. For scientific development of wildlife in Delhi a scheme entitled "Strengthening of Wildlife Section" was incorporated in the year 84-85, the last financial year of the VI. Plan so as to give the enforcement activities for Wildlife Preservation a Boost. The scheme stands not only approved but formulated also by the Government of India itself. The scheme came into existence in the last year of Sixth Plan but no headway was made during the 5th Plan. The aim of this schemes to strengthening the Wildlife Section of Delhi Administration with more manpower and facilities, of mobility and communication so as to cope with modus operandi of the offenders. The work has been divided into:—

- (a) Intelligence and Enforcement
- (b) Administration and Licencing
- (c) Prosecution and publicity

Following posts are required for the proper enforcement of the provisions of the Wildlife (Protection) Act, 1972 :—

	Rs.	
1. Wildlife Officer	2000-3200	1
2. Wildlife Warden/Sr. WLI	1640-2900	2
3. Wildlife Inspector	1400-2300	8
4. Asstt. Wildlife Inspector/G.I.	1200-2040	1
5. Wildlife Guards	750-940	11
6. Stenographer	1200-2040	1
7. L. D. C.	950-1500	6
8. U. D. C.	1200-2040	6
9. Jeep Driver	950-1500	1
10. Motor Boat Driver	950-1500	1
11. Operator Film Project	1200-2040	1
12. Electrician	950-1500	1

Out of the above posts eight posts namely one post of W. L. O. and one post of Jeep Driver, one post of Boat Driver, one post of Stenographer and one post of Operator, Film Project and three posts of W.L. Inspector have already been created and process is on to fill them. In respect of the remaining 32 posts work study by the ARO is to be conducted during the current financial year.

For proper communication and transport facility on water and land, following equipment/material is proposed to be purchased for wildlife section :—

1. Jeep with Trailor	1
2. Wireless Sets	2
3. Film Cameras	2
4. Binoculars	2
5. Film Projectors	1
6. Air-conditioner for prosecution seized goods	1
7. Motor Boat	1

Out of the above machinery and equipments one Jeep Film Projector, one Air Conditioner, one Boat and two Film Cameras had been purchased during the year 85-86. The engine for the boat will be borrowed from the D. C. office whenever the need arises for patrolling on Yamuna Water. The funds saved in this way will be utilized for purchase of vehicle/alongwith other machinery & equipment already included in the plan which will be purchased during the current financial year.

The approved outlay for the 8th Plan and Annual Plan 1992-93 will be utilised on the following items :—

	(Rs. in lacs)	
	92-93	92-97
Salary	3.00	6.00
Motor vehicles/machinery/equipment	—	—
Office expenses	0.50	2.00
Other charges, including publicity & prapoganda	0.50	2.00
	4.00	10.00

36. Creation of Wildlife Sanctuary at Asola—(Rs. 285 lacs)

The Wildlife Sanctuary Project in the U. T. of Delhi at Asola is being implemented by Development Deptt. The objective for creation of Wildlife Sanctuary are to create environmental buffers to arrest environmental deterioration and to prevent encroachment on public lands and to arrest unplanned development. In this scheme following posts have already been sanctioned :—

1. Asstt. Conservator of Forests	1
2. Senior Forest Ranger	2

3. Forest Guards	12
4. Drivers	1
5. Deputy Ranger	4

Tools, implements and small machinery are essential items for afforestation programme (one water tanker) for the plantation work is also required during the year 92-93.

The details of the approved outlay is as follows :

	Annual Plan 92-93	8th Plan 92-97
	(Rs. in lacs)	
Rev.	41.50	180.00
Cap.	100.00	105.00
Total :	<u>141.50</u>	<u>285.00</u>

For supervision and management, following posts are to be created during the VIII Five Year Plan :—

1. Field Officer WLF—(DCF) Addl. (JAG)	3700-5000	1
2. Field Officer, WLF (DCF) Senior T. Scale	3000-4500	1
3. Asstt. Field Officer WLF (ACF)	2000-3500	2
4. Wildlife Officer (F. Ranger)	1400-2300	6
5. Guard of Wildlife (Dy. Rs.)	950-1500	12
6. U.D.C.	1200-2040	1
7. L.D.C.	950-1500	4
8. Steno (Jr.)	1200-2040	2
9. Forest Guards (under study of AR)	775-1025	36
10. Peon-cum-Messenger	750-940	1
11. Drivers	950-1500	3

During the VIII Five Year Plan, provision for creation of the above posts and purchase of three Gypsy has also been kept.

Total approved outlay for the VIII F.Y.P. is Rs. 285.00 lacs including misc. expdr. of Rs. 1.80 (Misc. exp.-1.00 lac. (Management Plan Stationery-.50 lac+Generator-30 lacs).

Capital outlay of this scheme is being dealt by the Irrigation and Flood Control Deptt. to be utilized for construction and maintenance of boundary wall, inspection path along the boundary (in side), construction of administrative and residential

complexes, inspection bungalows and watch towers. 42 K.M. boundary wall has already been completed and the balance 6 K.M. will be completed during the year 92-93.

New Scheme

37. Strengthening of Administrative Management & Publication Measures—(Rs. 15 lacs)

Afforestation and tree plantation in Delhi are as old as the capital since early this century. Immediately after shifting of capital from Calcutta, Northern & Southern Ridges were declared Reserved Forest & development under a regular working plan 1952 National Forest Policy laid down 22% of the land mass in the plains under forests. Accordingly afforestation activities in Delhi picked up. Panchayats gave lands liberally for tree plantation and afforestation.

Organisation and expansion of the Forests Department did not keep pace. Initially we had a Forest Officer on deputation from U.P. as S.C.O in Delhi. After his repatriation not only the work, but even the organisation got a set-back. The Department was placed under agriculture. In early eighties the Technical Officers made an assessment of the organisational requirements of Delhi in light of the latest reports received through the Remote Sensing with regard to the rate of diminishing forests during the preceding ten years, which was alarmingly high. Accordingly they recommended and wrote to Delhi Administration to have a Conservator with two Deputy Conservators for the Forest Deptt. of Delhi.

The Govt. of India has laid norms with regard to creation of Forest Division and Circles. Going by those yard-sticks, Delhi requires two Forest and Plantation Divisions only the existing work-land. However, if the entire afforestation and tree plantation is taken into consideration, then we may require four to five divisions. Extensions and Social Forestry Divisions, go either by area or population of Delhi touching 80 lacs. Department require 2 to 3 Extension & Social Forestry Division. Learning apart, the re-organisation of Wildlife Wing, then comes the all important work pertaining to enforcement of Indian Forest Act, with a view to control and regulate fillings and transit of timber and other Forest produce. This is perhaps most important considering that forest area has come down as low as to 0.69% in Delhi. That requires yet another Division. And this works out to a fullfledged Forest Department with a Chief Conservator of Forests. It is perhaps necessary but appears too high at this stage.

Initially, therefore, we propose just one circle with a Conservator of Forests as is the norm and practice. We will have only three Forest Divisions with like posts of Dy. Conservators to head them. One will head the plantation, forests with about 140 Forest Guard Beats, the other will be incharge of Wildlife Management (i. e. Sanctuary) currently being held by the Deputy Conservator Plantation and Afforestation and Enforcement currently under non-technical control of the Dy. Commissioner and the third will head Extension and Social Forestry and Forestry Act Enforcement. We have only one Dy. Conservator of Forests in position. As such, we are making additional provision for only one Conservator and two Dy. Conservators.

In addition to staff, every deptt. whether old or new, requires, offices, furniture, stores, equipment, machinery, telephones, vehicles and expenses to meet other incidentals. Provision for all these has been made accordingly. A provision for training to

all ACR/SHR, FR and FGS has been kept during the VIII F.Y.P. For this purpose Rs. 3.20 lacs has been kept. The following posts are proposed to be created during the VIII Five Year Plan :—

1. Conservator of Forests	4500-5700	1
2. Dy. Conservator of Forests	3000-4500	2
3. Asstt. Conservator of Forests	2000-3500	1
4. Admn. Officer	2000-3500	1
5. Head Clerk	1400-2300	1
6. Reserch Officer	1640-2900	1
7. U.D.C's	1200-2040	1
8. L.D.C.	950-1500	1
9. Peons	750-940	2
10. Chowkidars	750-940	4
11. Messengers	750-940	1
12. Mechanic	950-1500	2
13. Drivers	950-1500	3
14. Forest Ranger	1400-2300	7
15. Tech. Asstt.	1400-2300	1
16. Dy. Ranger	1200-2040	9

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The project also involves the collection and dissemination of audio-visual information about the state of the environment forests and wildlife of the Union Territory of Delhi. It will focus on the negative effects of the rapid expansion of population, urban construction and industrial growth on the ecological system of Delhi. The project will try to suggest ways of rectifying the balance between the imperitives of development activities and the urgent needs of environmental conservation.

The aim is to collect material by way of still colour photographs and colour transparencies. This will enable the department to organise exhibitions and audio-visual presentations. Short films on video will also be produced.

The material so collected will be targeted at various social groups. In the first instance it will document the work of the Department and will be an invaluable training refresher resource. More importantly, it will help in the development of a consciousness towards matter concerning the environment. The exhibitions and films will be shown in schools and may even be introduced in adult education classes. Video hardware may not be required. The department can depend on hired vidio vans or the DAVP.

1. Short Video films of 15-20 minutes	Rs. 1.5 lacs
2. Vidco films of 60 minutes	Rs. 2.5 lacs

Five films of 15-20 minutes and 5 of 6 minutes will be required over a period of 5 years.

Total costs of video : Rs. 20 lacs.

The contract will require one pneumatic master and one VHS copy.

A. 400 colour prints (5" x 7", 8" x 10") @ Rs. 170 per print.

B. 600 colour transparencies (35 mm) @ Rs. 120 per slide.

A total of 1000 photographers is the minimum required to do 5 Audio-visual presentation and to organise 5 exhibition materials.

Total costs of photographs/slides Rs. 1.4 lacs.

The contract will require that all copyright vests with the department. The department will require 1000 photographs per year for a period of 5 years. Slides and colour photographs age with use and time to the material will have to be renewed annually.

Total costs of photographs Rs. 1.4 lacs x 5 = Rs. 7 lacs.

Grand Total :

	Rs.
Video	20 lacs
Photo	7 lacs
	<hr/>
	27 lacs
	<hr/>

The following posts are proposed to be created during the VIII Five Year Plan :—

1. Publicity Officer (ACF)	2000-3500	1
2. Publicity Asstt. (FR)	1400-2300	1
3. UDC	1200-2040	1
4. LDC	950-1500	2
5. Forest Guards (SP)	775-1025	2
6. Driver (LVD)	950-1500	1
7. Peon	750-940	1

Break-up of total approved outlay for 8th Plan is expected to be :—

	lacs
(a) Creation of posts	4.00
(b) Purchase of maintenance of vehicle	1.00
(c) Publicity & Propaganda	9.00
(d) Misc. Charges	1.00
	<hr/>
Total	15.00
	<hr/>

Forest Division had proposed to create 38 posts under the scheme "Field Management" and 9 posts under the scheme "Publicity & Awareness". In a meeting held under chairmanship of Secretary (Plg.) held on 31-10-91, it was decided that the two schemes be merged together and taken provision of Rs. 5 lacs for the 8th Five-Year Plan and Rs. 1 lac for 92-93 may be proposed and posts may not be created.

Approved Outlay :

	(Rs. in lacs)	
	92-93	92-97
Rev.	6.00	15.00
Cap.	—	—
Total	6.00	15.00

Proposal for creation of posts will be made during the month of June, 92. However, creation of posts & subsequent appointment is not expected during this financial year. Therefore no amount has been kept for salaries. In the event of temp./ad-hoc appointment for the publicity programme expdr. in form of wages may be required during the later part of year. Case of the sanction will be moved when required.

Case for procurement of vehicle will be moved for sanction and purchase will be made July/Sept., subject to sanction, availability etc.

As and when required, case for purchase of equipment, Purchase of V.C.R. & Colour T.V., Casserol Slide Projector, case for sanction will be moved in June, 92. Purchase will be made in July & August, 92 subject to availability of sanction.

Collection of adequate materials in the form of short Video films (15 to 30 Min.) sequential audio-visual material (30 mm colour) diapositive/slides and monogramme Black-white photograph for a field publicity and awareness campaign will be made through DPR/DAVP. Since the project involves highly technical work of films making and photography alongwith specialization in the region of Conservation Education. Proposals will be invited from established Video Film Makers/Documentary Makers of good repute having the necessary knowledge & experience, in the subject required to be tackled as well as in the technique of Film making. Case for sanction will be moved during the last week of June, 92. A first advance payment will have to be made alongwith awarding of work to the selected film Co. and subsequent payment will be made in 02 instalments on the basis of chronological delivery by the Film Co. which should be during in the 3rd, 5th and final month of the year after the work is awarded.

E. Animal Husbandry

37. Control of Contagious Diseases Programmes in Hospital/Dispensaries —(Rs. 150 lacs)

It is accepted fact that only high yielding cattle and buffaloes can be profitable kept in U. T. of Delhi where cost of land labour, feed stuffs and sheds etc. is high. The

high yielders requires better health coverage by way of timely preventive vaccinations and better and quicker treatment facilities. With some of the commercial dairy colonies established in U. T. of Delhi & very large cattle & buffaloes to and from these centres to rural areas & adjoining states, special attention has to be paid for improved veterinary facilities by way of more vaccines, more medicines & hospitals, more mobile vaccination and surveillance teams and improvement in diagnostic facilities qualitatively and quantitatively. The ever increasing difficulty in bringing seriously sick animals to Hospitals necessitates opening of 15 more hospitals, in rural areas by Administration so that these difficulties are over come prompt and better services of hospitals coverage to be provided. Keeping these factors and objectives in view the scheme envisages :—

- (a) Setting up 15 more hospitals during the 8th plan period in 1992-93. 2 such hospitals are to be opened in 1992-93 whereas in subsequent years, the number of hospitals to be opened will be 3 in 92-93, 9 in 93-94 & 9 in 94-95—15 total. Land if not provided by Panchayats is to be acquired and will be developed.
- (b) It is proposed to increase the supply of medicines, vaccines, equipments/ furnitures etc. for these hospitals and dispensaries of the Administration.
- (c) Training to the in-service veterinarians and para staff will be provided in modern technique and specialisation course like M.V.SC courses etc.
- (d) Hospital building will be constructed for all proposed hospitals on lands donated by Panchayats/acquired lands to provide working facility and space for improved services.
- (e) One hospital at each of 5 block H. Qs. will be upgrated for double shift duties to provide services in emergency even at odd hours and at night. Preliminary diagnostic and A.I. facilities will also be provided.
- (f) It is proposed to add 4 more Surveillance & Rinderpest vaccination mobile teams.
- (g) It is also proposed to strength in the present diagnostic laboratory at Moti Bagh by not only providing better equipments and chemicals etc. but also by bringing in specialists in Pathology, Bacteriology, Virology, Surgery & Medicines etc. and also add a Mobile fully equipped disease diagnostic lab. with it so that in complicated cases, specialised services can be rendered quickly after better diagnoses treatment at the hands of specialists at the central referred polyclinics.

This shall necessitate not only recruitment of trained and qualified specialist but will also require administrative decentralisation of powers and responsibilities and better communication facilities with more effective inspections for good working results. For this it is also proposed to have 6 Asstt. Directors, one for polyclinic & 5 for block level H. Qs. They shall be responsible for all decentralised functions of administrative control like pay & allowances, services records, purchase of medicines, vaccines, equipment, supervision and assessment of work being done in Hosp. & Dispensaries, in their

respective block areas for ensuring better results. Requirement of staff during the 8th Five Year Plan is as under :—

Sl. No	Name of post	Scale of Pay	Nos. of posts		Total
			92-93	93-94	
1.	Asstt. Director	2200-4000	6	6	6
2.	Virologist	2200-4000	1	1	1
3.	Bacteriologist	2200-4000	1	1	1
4.	Pathologist	2200-4000	1	1	1
5.	Surgery	2200-4000	1	1	1
6.	Medical Supt.	2200-4000	1	1	1
7.	V.A.S.	2200-3500	18	27	54
8.	Vety, Compounder	975-1540	9	18	45
9.	Area Extu. Officer	1400-2300	9	18	45
10.	Stockman	975-1540	34	43	70
11.	Water Carrier	750-940	9	18	45
12.	Chowkidar	750-940	9	18	45
13.	Driver	950-1500	5	5	5
14.	Attendent	750-940	10	19	46
15.	Sweeper	750-940	10	19	46
Lab. Staff					
1.	Store Keeper	1200-2040	1	1	1
2.	Lab. Asstt.	975-1540	7	7	7
Office Staff					
1.	Supdt.	1640-2900	5	5	5
2.	Head Clerk	1400-2300	5	5	5
3.	U.D.C.	1200-2040	10	10	10
4.	L.D.C.	950-1500	10	10	10
5.	Peon	750-940	5	5	5
Total			167	239	455

Financial, Implication
1992-93

40 lacs (Rev. 10 lacs +
Capital 30 lacs)

1992-97
8th Plan

Rs. 150 lacs (Rev. Rs. 50 lacs
+ 100 lacs Capital)

Physical target is of opening of one Polyclinic, 3 Vety. Dispensary every year, 15 in all during 8th Plan.

38. *Society for provision of Cruelty to animals (DSPCA)—(Rs. 25.00 lacs)*

Delhi S.P.C.A. is a registered society since 1928 under Societies Act and is responsible for the prevention of cruelty to animals as per provisions of the Act and also has an educational role for general public so that they be have kindly to animals and challan the persons who use injured animals or cause any other act of cruelty to animals. For the fulfilment of the objectives its financial position is poor to be effective and accordingly it is proposed to give grant-in-aid in the 8th Plan period also to the society.

At present the building of the society needs heavy repair and it also needs to be provided with 2 more ambulances vehicles besides increased expenditure on pay & allowances. It is also to fill up some posts to cover areas yet not covered by the SPCA like rural mandis. It is, therefore, proposed to continue giving grant-in-aid but also to increase the amount of Annual grant to enable it to meet its obligations & functions. The amount of Annual grant-in-aid is given on quarterly basis as per the terms and conditions approved by the Govt. of India.

FINANCIAL IMPLICATIONS :

92-93	92-97
Rs. 20.00 lacs	Rs. 25 lacs

Main objectives/achievements of the scheme to justify the grant-in-aid are as under :—

1. It shall enable the society to intensify its educational role as well as enforcement role under Act of Prevention of Cruelty to Animals.
2. Increase operational area to include rural Mandis also.
3. It shall be able to provide better treatments and Ambulance service to ownerless, destitute animals.
4. It shall be able to get its buildings, vehicles, equipments maintained better for good service.
5. The appointment of Administrator instead of Administrative Officer shall lead to better discipline & performance and may, it is hoped, lead to increase in its earnings from fines so as to eventually reach a situation where by the end of 8th Plan no further grant-in-aid will be needed ultimately.

39. *Grant-in-aid to Goushala—(Rs. 20 lacs)*

The cow and its pregnancy commands great reverence. The scheme provides financial assistance for maintaining the unproductive, old and infirm animals by the Goushalas.

It generally seems that the unproductive, old and infirm animals are seen loitering on roads. They are a great source of road accidents etc.

These animals also cause great loss to standing crops in rural areas. Local bodies round up such animals and detain them in ponds for a week or so and then auction them, if not claimed. Even after this, uneconomic animals are not disposed off so local bodies face great difficulties in disposal of such animals.

Under the scheme it is proposed to provide grant-in-aid to the Goushalas which provide shelter to animals sent to the Goushalas by the local bodies. The economic condition of Goushalas is not so sound as to meet the cost of maintaining such animals properly. It is proposed to grant-in-aid @ 500/- per animal annually. The quantum of grant-in-aid has been increased from Rs. 250/- to Rs. 500/- due to high rise in costs of feed and fodder, labour, building material etc. This will go a long way for providing proper shelter and feeding to such destitute animals and also solving the problem of stray animals nuisance.

FINANCIAL IMPLICATIONS (APPROVED OUTLAY)

Grant-in-aid to Goushala	92-93	92-97
	Rs. 4 lacs	Rs. 20 lacs
Physical Target		
	92-93	92-97
	800 Animals	4000 Animals

40. *Artificial insemination (A.I.) through Frozen Semen—Key Villages—(Rs. 30.00 lacs)*

Cattle play a vital role in the economy of rural as well as Urban Delhi and according to the statics survey conducted in 1987 there are 27253 cows and 1,23,893 buffalo which produced 219000 tonnes of milk. The target during the 7th Five Year Plan are production of 220000 tonnes of milk, though it is likely to exceed 230000 tonnes. It is proposed to increase the milk production to 310000 by the end of 8th Five Year Plan.

Similarly targets of artificial insemination with high quality exotic semen will be raised from 14000 insemination to 18500 inseminations.

The stress during the 8th Five Year Plan will be on increasing the efficiency and quality of service. The increase in milk production will be achieved through increase in cattle population, improvement of existing live stock through cross, breeding with high quality exotic semen and selective breeding in buffalow with superior germ plasma of progeny tested bulls. There are 21 Frozen Semen Centres in Delhi and 40 more frozen semen centres will be established in the Hospitals to take their facility to the door step of the farmers.

Due to increasing traffic, it is difficult to take any animals to distant located Hospitals and, therefore, it is proposed to establish 40 new A.I. Centre providing one A.I. Centre for 2000 cattle unit population.

It is proposed to establish a liquid Nitrogen Plant at Satbari about 25 km. away from the city. There are adequate infrastructure facilities like land and building with lahore and facility for erection of liquid nitrogen plant.

For the implementation of the scheme, following staff is required :—

S. No.	Name of the Post	No. of Post	Pay-scales in Rs.
1.	Dy. Director	1	3000-4500
2.	Steno	1	1200-2040
3.	U.D.C.	1	1200-2040
4.	Rfg. Mechanic	1	1200-2040
5.	L.D.C.	1	950-1500
6.	Driver	1	950-1500
7.	Attendant	1	750-940

It is estimated to do 90000 A.I. with the exotic semen during 8th Five Year Plan i.e.

<i>Physical Target</i>		
92-93=17000	93-94=17500	94-95=18000
95-96=18500	96-97=19000	

with establishment of 40 more A.I. Centre.

Financial implication (Approved outlay)

Annual	Total 8th Plan
92-93	92-97
Rs. 6 lacs	Rs. 30 lacs

41. Production of Broiler Chicks—(Rs. 43.70 lacs)

The Model Govt. Poultry Farm was taken over from the Defence Authorities prior to 1948 by the Delhi Administration and set up at Delhi Cantt., Delhi. In the year 1976 this farm was shifted to Satbari in Mehrauli block. Since the inception of the farm technical and scientific knowledge for the development of Poultry is being imparted through the media of this Farm of Breeding Poultry Owner of Delhi.

The Broiler Production Scheme is proposed to continue in the 8th Plan. There is wide gap between demand and supply of commercial day old Broiler Chicks in the U.T. of Delhi. Resulting in short supply and higher price. A few hatcheries are in the existence by Private Owners, who have monopoly in field.

To enhance the margin of profit of the small farmers of the Delhi through the production of day old commercial broiler chicks and to meet their demand of broiler which are in short supply by full utilisation of existing facilities available at farm. It is proposed to purchase 10,000 hatchings eggs of parent stock from (ICAR) Project Director of Poultry, Hyderabad, Rajender Nagar (AP). This will enable us to tide over the short supply at Broiler commercial chicks to the UT of Delhi small breeders.

Moreover, these chicks would be sold at cheaper rate of the other commercial hatcheries.

No infrastructure is required for the implementation of this Scheme as the same is available at the existing farms. It is expected that full utilisation of the existing hatching facilities would be available at farm. The financial aspects for the farm would also be improved with the extension of Scheme.

This Scheme was started in 1978-79 with the aim of production of day old good quality commercial broiler chicks and to supply the same to the small farmers of UT of Delhi at reasonable rates. Under this Scheme about 6,00,000 of commercial chicks were supplied at a cheaper rate than the private hatcheries and in this way the scheme has helped large number of small Poultry Farmers in Delhi in supplementing their income and indirectly animal protein to the people.

Statement showing financial/physical target in various Plan Schemes

(Rs. in lacs)

	1992-97	1992-93
Financial		
(a) Broiler Poultry Production Farm	43.70	17.94 (Rs. 6 lacs Capital— Rs. 11.94 Revenue)
(b) Trg. to SC/ST	0.30	0.06
(c) Extn. Trg. & Dem. Unit	6.00	3.00
	1992-97	1992-93
Physical Target		
(a) Broiler Poultry Production Farm		
	Eggs	15.00 lacs
	Chicks	3.00 lacs
		5.00 lacs
(b) Extn. Trg. & Dem. Unit	1000 Candidates	250 Candidates
(c) Trg. to SC/ST Candidates	250 Candidates	50 Candidates

Under this scheme good quality of broiler commercial day old chicks will be produced. It is a poultry development scheme for helping the small farmers and provides them chicks at reasonable rates. It provide good animal protein to the public under this scheme. It is proposed to produce more than one lac chicks for

distribution every year to the small farmers of the UT of Delhi. Break-up of Rs. 11.94 lacs is given below :—

(a) Staff Component	0.80
(b) Office Expenses :	
1. Stationery	0.06
2. Telephone	0.10
3. Electricity	1.50
4. POL	0.34
5. Maintenance	0.10
	2.10
(c) Material & Supplies :	
1. Saw Dust	0.34
2. Parent Stock	0.20
3. Feed	8.00
4. Medicine	0.40
5. Chicks Boxes	0.10
	9.04
Total :	11.94 lacs

42. Assistance to SC/ST Candidates for Poultry Training—(Rs. 30 lacs)

This is a special component scheme under 20 point programme. Under this scheme about 50 SC/ST Candidates are trained. The training is given for 15 days and a stipend of Rs. 100/- is given to each beneficiary to meet the expenses during the training.

During 7th Five Year Plan, 157 Candidates have been trained in Poultry Farming. This scheme aims to bring the weaker section of the society above the poverty line.

An amount of Rs. 0.30 lac have been kept for the 8th Five Year Plan which included 6,000/- for the Annual Plan 1992-93 year 40-50 Candidates are to be trained during the financial year 1992-93 :—

	1992-97	1992-93
No. of SC/ST Candidates trained	250 Nos.	50 Nos.
No. of persons trained under General Training Programme	1000 Nos.	250 Nos.

43. *Poultry Training-cum-Extension Scheme and Demonstration Unit—(Rs. 6.00 lacs)*

In live stock farming, poultry is most popular and advanced branch. It has been taken the shape of a well organised industry. More and more people are coming to this line. It is not uncommon to see as large as one lac birds from farm of Delhi. They are large type, medium and small types of farms, spreading throughout the Union Territory. In rural area small side line Units are coming up. As there is chronic shortage of land in Delhi, people are looking for poultry farming, as in this line small area is needed for keeping the birds, that is why in villages where poultry was not popular earlier, the Villages are eagerly adopting the poultry farming to supplement their income. But in poultry, now a days, inputs are very high and if it is not done on scientific line, no success is expected, that is why, some farms fail due to lack of proper knowledge. So the farmers must have basic knowledge of modern way of poultry keeping and commercial know how, to run their farms on profit basis. Moreover, even after setting up a farm, there must be some agency to guide them from time-to-time, and acquaint them the latest technique and also to vaccinate his birds in time.

At present, at Govt. Poultry Farm, two courses of poultry training are conducted for one month duration, in which only one hour classes is conducted, which is not sufficient. In each course there is too much rush but we take only about 150 candidates including 50 from Defence. There is no lecture hall, no Demonstration Unit etc. The duration of this course is not sufficient and there is no proper staff who can pay more attention to this job. So to organise this training programme and extension activities in the field, it is proposed that a separate training cum demonstration and Extension Wing may be set up to cope the rush of the poultry training candidates.

The main functions of this set up will be :—

1. It is for 8 weeks course in which training will be imparted on modern scientific way of poultry farming.
2. There will be 4 such courses in a year.
3. There will be 50 trainees at a time.
4. There will be a Demonstration Unit of 500 Layers & 500 Broilers.
5. These Units will be looked after by the trainees themselves. They will work with their own hands. In this way they will have a practical knowledge of poultry farming. There will be one refresher course for the farmers who are already in this line to transfer to them the latest technology on a particular subject.
6. There will also be refresher course for the extension staff from time-to-time.
7. The extension staff will be visiting the farms and will provide after sale services in Delhi. They will vaccinate their birds and will render on the spot advice to the farmers and will supervise the work of vaccination, debeaking, grading, culling etc.

The following infrastructure is needed for this scheme.

(a) 1. Lecture Hall : 30' x 40'	1-20
2. Hostel of 20 Students	1-50
3. Office and Telephone	0-40
4. Demonstration Room	0-25
5. Broiler & Breeding Shed (2) 30' x 50'	0-90
	<u>6-05</u>
(b) Equipments	0-30
(c) Recurring Expenditures	
1. Cost of Chicks	0-18
2. Foods	1-00
3. Medicines & Vaccine	0-30
4. Misc.	0-10
5. Honorarium to outsider lecture	0-10
	<u>1-68</u>

(d) Staff

1. Office Incharge Trg.-cum-Extn.	Rs. 3000-4500	—1
2. Lecturer	Rs. 2200-4000	—1
3. Demonstrator	Rs. 2000-3500	—1
4. UDC	Rs. 1200-2040	—1
5. Peon	Rs. 750-940	—1
6. LDC	Rs. 950-1500	—1
7. Labour	Rs. 750-940	—1

The total expenditure for the year 1992-93 is as under :

Sub-Head	1992-97	1992-93
	<i>(Rs in lacs)</i>	
Capital	—	—
Equipment	—	—
Contingency	2.00	1.00
Staff	4.00	2.00
	<u>6.00</u>	<u>3.00</u>

Detail break-up of Rs. 3 lacs is given belows :—

Electricity Charges	2.00
Submersive Pump Set	0.25
POL	0.30
Medicine	0.20
Office Expenses	0.25
Total :	Rs. 3.00

44. *Delhi State Livestock Products Processing Corporation—(Rs. 1.00 lac)*

The Delhi State Livestock Products Processing Corporation has already been registered under the Companies Act., 1956. There are 9 Board of Directors, 3 from Govt. of India and 6 from Delhi Admn. The Corporation proposes to set-up a Slaughter House.

A techno-feasibility report has been prepared by the Tropical Research and Development Institution, U. K. and the cost has been estimated to Rs. 34.00 Crores at 1983 pricelevel. The Govt. of India and Delhi Admn. will contribute 1/6th as share capital and the remaining 2/3 will be obtained as institutional loan for which Agricultural re-financing Corporation has already agreed. It is therefore, proposed to provide 6 crores as share capital of Delhi Administration. The impleating period for the project is about 2-1/2 yrs. and therefore, the total share capital has been split into 3 years.

The slaughter house will also provide facility for export of meat and meat products and be helpful in earning valuable foreign exchange.

Presently efforts are being made to locate a suitable site for the proposed slaughter house free from public objections. As such only a token provision of Rs. 1 lac has been kept for this scheme in the 8th Five Year Plan.

45. *Control of Contagious Diseases—(Rs. 24 lacs)*

There are 9 Dairy Colonies where dairy animals of urban areas have been shifted. There are about 35,000 animals kept in these dairy colonies. Due to congregation of large number of animals at one place and very frequents replacement of dry animals with the productive ones has resulted in increase of diseases in these dairy colonies. Out-breaks of Rinderpest Disease has necessitated the need to provide on the spot facilities for quick diagnosis and treatment.

At the time of out-break of Rinderpest disease a Task force was constituted by the Govt. of India. Task Force recommended that modren hospital building with diagnosis facilities, boundary wall around the colonies and an incinerater should be provided. It is proposed to construct new hospital buildings where all facilities will be provided to diagnose and suggest remedial measure on the spot will be available. Hospitals will be fully equipped with modern facilities. One incinerater for large animals will be installed at Dairy Colony Gazipur to dipose off the carcasses

of animals died due to contagious disease. It is proposed to provide following staff in 9 Dairy Colonies to improve the working of the hospitals.

S. No.	Name of Posts	No. of Post	Pay scale in Rs.
1.	Asstt. Director	5	2200-4000
2.	U.D.C.	5	1200-2040
3.	Incinerator Operator	1	1200-2040
4.	Lab. Asstt.	5	975-1540
5.	L.D.C.	5	950-1500
6.	Driver	1	950-1500
7.	Peon	5	750-940
8.	Chowkidar	5	750-940
9.	Sweeper	5	750-940

Financial implication (Approved outlay) :

	Annual Plan 92-93	8th Plan 92-97
Rs. 20 Lacs (Rev. Rs. 5+Capital Rs. 15 lacs)	24 lacs (Rev. Rs. 10 lacs+Capital Rs. 14 lacs)	

Physical Target

Prophylactic Vaccine are likely to be given as under during the year 1992-93 :

	8th Plan (1992-97)	Annual Plan (1992-93)
(1) R.P. Vaccine	7.5 lacs	1.5 lacs
(2) F.M.D.	2.5 „	0.5 „
(3) M.S.	4.25 „	0.85 „

46. *Imp. to existing Slaughter House—(Rs. 40 lacs)*

An outlay of Rs. 40 lacs is approved during 8th Plan for immediate necessary works like improvement in Halal Section, Jhatka section, buffalo section, buffalo slaughtering platform water through loading/unloading platform in buffalo & sheep/goat market at site in the absence of modernisation of the slaughter house. An outlay of Rs. 20 lacs is approved during 1992-93.

47. *Modernisation of Idgah Slaughter House at its existing site or in other New Places—(Rs. 26.10 lacs)*

MCD is running a slaughter house on Idgah Road. The Slaughter House is 19 years old and is still using the primitive method of slaughtering which results in insanitation, environmental pollution and wastage of bio-products. This Slaughter House is unable to meet the tremendously increasing demand of meat for Delhi's population

through its original capacity has been increased 15 to 20 times. At present about 8000 sheeps/goats and 2000 cattles are being slaughtered per day in two shifts to meet the needs of local consumption as well as export.

To modernise the existing slaughter house at Idgah Road, MCD is seeking the assistance of Hungarian Government. Accordingly, techno-economical feasibility report has been prepared with the assistance of Hungarian Government at an estimated cost of Rs. 30.30 crores. The proposed modern slaughter house will have the capacity of slaughtering 6000 goats/sheeps plus 1000 buffalow for local consumption and 2000 sheeps/goats plus 1000 buffalow for export per shift of 6 hours. The details of the cost estimates for the modernisation of slaughter house are as under :—

	Rs.
(a) Civil Works. consisting of various bldg. blocks upto six stories	1132 lacs
(b) Services like water supply, HT & LT mains sewer, under ground pump, internal roads horticulture work and street lighting work etc.	152 lacs
(c) Equipment for dry rendering plant, including consultancy transportation erection etc. with refrigeration and cold storage steam and hot water supply	1746 lacs
Total :	<u>3030 lacs</u>

These cost estimates have been approved by the Corporation in September, 1990 subject to Government of India's approval. The proposal had already been cleared by the Commissioner, Animal Husbandry, Govt. of India, Ministry of Agriculture on 19-7-1989. Clearance/No objection has been obtained from International Airport Authority, Indian Air Force, Pollution Control Board and DDA for this project as desired by Ministry of Agriculture. PIB's Memo had been sent to Ministry of Agriculture but the sanction is still awaited.

MCD has also received a notice from the Central Pollution Control Board, Government of India that either this Slaughter House may be modernised or to close to avoid environmental pollution. Delhi High Court has set up a Committee under the Chairmanship of Deputy Minister of Commerce, Government of India to decide the matter by 31-12-1992. The representatives of the Agriculture Ministry, Delhi Administration, MCD and Ministry of Finance are its members.

Keeping in view the decision of the Committee set up by the Delhi High Court either the existing slaughter house would be modernised at its existing site or it would be shifted to any other new site namely Narela, Burari or any other place to modernise the same.

An outlay of Rs. 2610 lacs is approved for this project in the 8th Plan which includes Rs. 477 lacs for the Annual Plan 1992-93.

MCD Veterinary Hospitals—(Rs. 50 lacs)

Municipal Corporation of Delhi is running 19 veterinary hospitals and 2 dispensaries under its jurisdiction. Out of these 21 hospitals/dispensaries, 11 are being run in rented bldg. whereas 10 hospitals are running in M.C.D. owned bldg.

During the 8th Plan 1992-97 it is to proposed to develop/improve the existing veterinary hospitals viz.

1. Tis Hazari
2. Alipur
3. Palam
4. Prehladpur
5. Badli
6. Najafgarh
7. Dhansa
8. Karawal Nagar
9. Shahdara
10. Jharoda.

Condition of the hospitals which are running in rented bldgs. is also not satisfactory. Most of these hospitals are running in a bldg. which are badly delapidated and in bad condition. Therefore, such hospitals have to be shifted to some other suitable sites. At present MCD have two sites in its possession in Palam & Qutabgarh which needs immediate development to enable the shifting. So provision has also been made for these schemes. Further there is a growing demand from Gram Panchayat for opening new veterinary hospitals in the rural areas has also been considered and token provision has also been made for the same.

For the above schemes of veterinary hospital, a budget outlay of Rs. 50 lacs has been provided during 8th Plan 92-97 of which Rs. 5 lacs are meant for 1992-93.

F. Fisheries Development*49. Reorganisation of Inland Fisheries Activities--(Rs. 60.00 lacs)*

“Fisheries Unit” started its functioning in Delhi since 1947. From 1947 to date this unit has been extended in all subsequent plan schemes. While proposing the outgoing 8th Plan, this unit proposed the following plan schemes :—

- | | |
|-------------------------------------|--|
| 1. Education & Training | : No. of posts were proposed and hence no post is sanctioned. |
| 2. Other items conservation | : It was a plan continuous scheme and six post of Class-IV sanctioned. |
| 3. Inland fisheries Sport fisheries | : 20 posts of Fisherman-cum-Watchman sanctioned in March, 91. |

In all 26 posts of class-IV employees were sanctioned in these plan schemes uptill now.

It is proposing the merger of all three plan schemes into one scheme Inland Fisheries-expansion and reorganisation of Fisheries activities in U.T. of Delhi to minimise the plan schemes.

At present the fisheries unit have the following work/activities.

1. Enforcement of Indian Fisheries Act, 1897 and Punjab Fisheries Act, 1914 extended to U.T. of Delhi.
2. Extension of work.
3. Production of spawn by different methods.
4. Rearing of spawn to fry and fingerlings stage.
5. Stocking of waters with fast growing good strain of fish.
6. Adoption of latest breeding techniques.
7. Training of fisheries personnel and local people.
8. Reclamation of water logged area.
9. Salvation operations in the event of contingencies.
10. Introduction of exotic variety of fishes.
11. Deweeding operations.
12. Providing of facilities to anglers.
13. Development of air-breathing/cat fishes.
14. Issues of licences for varying periodically and auction of various waters.

The above activities of the fisheries unit are mainly confined to the following sites :—

1. Shahdara fish farm.
2. Seelampur fish farm.
3. Barwala fish farm.
4. Jasola fish farm.
5. Okhla Barrage.
6. Wazirabad Barrage.
7. Yumuna and its tributaries and Hindon canal etc.

Aims and Objects :

The aims and objects for the 8th Five Year Plan is that we may provide a composite service in the field of fisheries to the U.T. of Delhi. As Delhi being an urbanised and industrial city have a very limited scope for the development of fisheries but the above factors have not stopped the flow of river Yamuna and Hindon, besides these rivers we have to take care of various bunds/ponds etc. these are all helpful in production of more fish as a part of our national programme for self sufficiency in food stuffs. The activities of fisheries department is also generating jobs and work facilities for the

persons in trade of basket making, net making, ice trading etc. Thus the fisheries activities are helpful in generating employment and increasing the production of protein rich good stuff and care of these factors are to be watched in 8th Five Year Plan.

The above aims and object can only be achieved in the following programmes :-

Education and Training :—Education and Training is an essential factor for development of latest techniques to obtain maximum fish yield, trained staff is a must. It is proposed to sent 4-5 people to the centre established by Govt. of India in various places in the country. Administration will meet the requirement about travelling/boarding expenses of local fisherman. Approximately a sum of Rs. 50,000/- @ Rs. 10,000/- in each year will be needed in this plan. Beside local fisherman will be trained through our ext. staff.

Inland fisheries (Capital) :—It is proposed to construct new farms and expansion of existing farms for the production of fast growing varieties of fish seed and stocking arrangements etc. This aim will be achieved by construction of nursery ponds and maintenance of the existing nurseries and stocking ponds. It is proposed to develop nursery area some 20 hectares/30 hectares by constructing a fish farm at Jasola.

Okhla is famous for sport fishing in the fishing world and is known as Anglers Paradise' not only professional but amature anglers which includes foreingers, Diplomates and High officials etc. have interested in this field so it is proposed to construct an anglers lodge for these visiting persons where facilities like sitting arrangement, drinking water facilities, telephone facilities and sheds in rainy seasons will be provided.

Revenue :—Fishing activities are open from 6.00 AM to 8.00 PM and fishing activities can only be performed by the 'Licence Holders'. Thus to check them we have conservation staff like supervisors, and watch and ward staff. These persons ensures that no unauthorised person work in this field and also ensure that no fishing be made in night hours. A study about staff position was conducted by the administrative department of this administration and suggested atleast 3 shifts of 8 hours each should be there in place of 2 shifts of 12 hours is to stop the discrimination in this regard. Staff will also be required for the newly constructed farm at Jasola (under construction). There are no promotional avenues for the staff even though there are judgement of courts and suggestion of pay commission that at least 20% posts should be available for promotional avenues and considering these all aspects some posts are to be created to give promotional avenues particularly to class-IV staff. At present our farms are managed by a non-gazetted officials in the pay scale of U.D.C. etc. and to provide better management and responsibilities of these farms should be under control of a gazetted officer in the scale of Office Supdt./etc. so that 40-50 person working at farms may not run to this headquarter for their pay collection and these officers will also serve as Drawing and Disbursing Officers there.

Considering the above facts, this unit needs the following additional staff.

Name of Post	Scale	No. of Posts
Already Sanctioned Posts of Class-IV employees	750-940	26
To be created :		
Farm Superintendent	1640-2900	4
H. Clerk	1400-2300	1
A. W. Fisheries	1350-2200	7
Lab. Asstt.	950-1500	4
Pump Opt.	950-1500	3
Motor Boat Driver	950-1500	2
Hd. Watcher	800-1150	16
Chowkidar	750-940	8
Peon	750-940	3
Mali	750-940	4
Sweeper	750-940	7
Fisherman-cum-Watcher	750-940	6
		65

In addition to salaries, we require some minor expenditure for the purchase of two Motor boat, pums sets and fishing accessories as equipment and to maintain production level fish seeds/food and chemical etc. will be required in addition to office expenditure on printing cards, licence books, telephone, water and electricity bills, liveries to class-IV employees, furniture and stationery.

The provision required for capital outlay, salaries and contingencies etc. has been reflected in the following tables :—

(Rs. in lacs)

Item	92-93	92-97
Salaries for sanctioned posts	4.50	22.00
Salaries for new posts	1.00	4.00
Equipments	3.00	4.00
Fish seed/food and chemicals	1.00	5.00
Office Exp.	3.00	5.00
Revenue	12.50	40.00
Capital	7.50	20.00

In view of above, this unit requires a plan outlay of Rs. 60.00 lacs in 8th Five Year Plan out of Rs. 20 lacs as Capital expenditure and Rs. 20 lacs for 92-93.

II. RURAL DEVELOPMENT

Out of the total area of 1483 sq. kms. of the U.T. of Delhi, 798 sq. kms. is rural and 685 sq. kms. is urban. The entire rural area is divided in five C.D. Blocks namely Alipur, Kanjhawala, Najafgarh, Mehrauli & Shahdara. The rural population as per 1991 Census was 9.43 lacs which accounts for 10% of the total population of Delhi.

Rural development in Delhi has a significant role in our planning process as it is a model for rural areas. A number of study teams from other countries and UNO agencies visit the rural areas of Delhi to see rural development programmes being implemented in India.

Although, efforts made by Delhi Administration have shown results and each village is connected by road, has electricity and water supply, sanitation etc., it is also a hard fact that rapid urbanisation has created a number of problems for the people of rural areas like decreasing the cultivable area, sanitation, encroachment by J.J. Colonies and industrial units, etc.

Delhi Administration is raying to provide suitable avenues of employment to the rural population through a number of programmes like Block Industries centres, rural industrial work sheds, promotion of Khadi & Village Industries, Handlooms, Handicrafts and Leather Industries etc. Rural sanitation programme, tree plantations, IREP, village development programme are being implemented to improve the environment in the rural areas of the Territory. The limited cultivable land is being put to intensive use through multiple cropping, intensive vegetable development and a number of other programmes. Above all, a comprehensive scheme for the "Integrated Development of Rural Villages" is being implemented since 1991-92 in Delhi.

7th Five Year Plan—Targets & Achievements

During the 7th Five Year Plan, 46 Chaupals were constructed for SCs against the target of 48 Chaupals. Similarly 18 Panchayat Ghars were constructed against the target of 21 Panchayat Ghars, 65 Village Wells were dug/renovated against the target of 82. During this period 418 bio-gas plants and 67 Wind Mills were installed. 3672 solar cookers were also sold by DEDA. Major Programmes implemented under this sector are 'Integrated Development of Rural Villages', Community Development and Panchayats, Consolidation of Holdings Integrated Energy Programme and National IREP Training Centre. In addition to these programmes, IRDP, NREP, RLEGP Programmes are being implemented as Centrally Sponsored Schemes.

Agency-wise expenditure incurred during the 7th Five Year Plan and Annual Plan 1990-92 and the outlays agreed for the Annual Plan 1992-93 and the 8th Five Year Plan 1992-97 are as under :—

(Rupees in lacs)

Name of the Agency	7th Plan Expenditure	Expenditure		Approved outlay	
		1990-91	1991-92	8th Plan 1992-97	Annual Plan 1992-93
1. Development of Department	160.54	93.39	690.00	35.00	416.00
2. D.C. Office	4.66	1.05	0.25	40.00	9.00
3. DEDA	426.45)	115.85)	85.00)	225.00	35.00
4. Mahatma Gandhi Institute for integrated Rural Ennergy Planning & Development	)	)	)	125.00	40.00
Total (Rural Development)	591.65	210.29	775.25	2475.00	500.00

(I) *Integrated Development of Rural Villages in Delhi (IDRV)*—(Rs. 2085 lacs)

As per 1991 Census, there are 253 rural villages. During the last two decades population in many of the villages has increased tremendously as compared to the infrastructure facilities to meet the day to day requirement of the villagers.

Agencies like, DDA, MCD, DESU, Water Supply & Sewage Disposal Undertaking, Flood Control Deptt., Education Deptt., Health Services, Development Deptt. and other deptts. of Delhi Administration have been playing an important role for the development of rural areas in the UT of Delhi. The contribution made by the above agencies for the development of different sectors has not been found up to the mark keeping in view the over-increasing population of the rural areas of Delhi. The problems of these villages are required to be tackled in an effective way. Keeping in view the various aspects, the Administrator of Delhi had constituted a small working group in September, 1984 for the preparation of a mini master plan for the integrated development of urban and rural villages over the next 20/25 years under the Chairmanship of the Development Commissioner, Delhi. The Working Group comprised various members viz. Secretary (Plg.), Director (Industries), Deputy Commissioner, Delhi, Dy. Commissioner (WS & SDU), MCD, Director (City Planning), DDA, Jt. Secy. (PWD), Addl. Distt. Magistrate (Development), Delhi. The Working Group has met several times and submitted its report in June, 1985. The Working Group has strongly recommended that various facilities/activities viz. Household industries, housing, community centres, Community facilities, work centres and infrastructure facilities like Water Supply, Electricity, Roads etc. must be provided in an integrated way in the rural areas in the U.T. of Delhi. In the light of the observations of the Working Group, DDA, MCD, DESU, DW & SDU had developed plots for community facilities, constructed drains and laid water and sewage lines in most of the urban villages. In spite of this adequate attention has not been paid for the development of rural villages in terms of their internal development, construction of roads, laying water and sewage lines providing community as well as infrastructure facilities. Infrastructure facilities

like Water Supply, electricity and construction of roads are inadequate as compared to the present requirements of rural villages and the surrounding colonies. It has been observed that street lights provided in most of the villages has been functioning poorly and inadequately in most of the villages. Similarly, water supply for rural area required to be augmented so as to meet their minimum requirements. The condition of roads in most of the villages has been very shabby due to lack of proper attention paid by the concerned departments/agencies. It is, therefore, considered necessary to supplement the efforts in this direction and coordinate the progress of various agencies.

Keeping in view the above problems of the rural area, it is pertinent to mention that the physical development of rural villages must be given proper attention. This will not only improve the environmental health of rural areas but will also bring social justice to the rural population of the U.T. of Delhi. In the light of the recommendation of the Working Group, a scheme namely 'Integrated Development of Rural Villages in Delhi' has been prepared with the objective to effect physical as well as socio-economic development of the rural area. The main objectives of the scheme are as under :—

- (a) To develop industrial household industries in the rural areas so as to create more employment opportunities for the agriculturists, farmers, labourers.
- (b) To develop community facilities viz. recreational, construction of chaupals and panchayat ghars etc.
- (c) To develop infrastructure facilities like water supply, electricity, const. of roads, vis-a-vis maintenance.
- (d) To develop housing sites for the harijans and landless people.
- (e) To develop commercial centres, work centres, recreational facilities etc.

This scheme is especially designed to provide and develop the various facilities as mentioned above so as to improve the socio-economic status of the rural villages. The scheme is being implemented by the Director (Rural Development). It is also proposed to strengthen the scheme during the 8th Five Year Plan by way of integrating various activities under the Director (Rural Dev.). The sub-sector-wise details along-with outlays are given below :—

1. Household Industries—(Rs. 60.00 lacs)

There are 253 rural villages as per 1991 census. Many of the villages are under industrialisation in one way or the other, but the industrialisation in these rural villages has taken place in an unorganised and haphazard way thus converting the villages into, industrial slums. This undesirable trend, which is against the rural environment, needs to be checked and must be given proper shape. It is proposed that mini-industrial estates be set up in the rural villages wherever feasible and more emphasis be laid on the development of household and villages industries. In the agricultural sector, it has been observed that the farmers and agricultural labour do not have full time jobs and can spare more time during the off-season which can easily be devoted to run household industries in the villages. This will not only provide employment opportunities to the rural people but will also improve their socio-economic

status. Initially a specific provision of Rs. 60.00 lacs under 8th Five Year Plan has been kept to take up this work in the rural area. For 1992-93 Rs. 12.00 lacs have been approved.

2. Infrastructural Facilities—(Rs. 160.00 lacs)

Infrastructural facilities included installation of water lines, sewage lines, construction of water drains, electric lines, telephone lines and construction of roads etc. in the rural areas of the UT of Delhi. It is fact that potable water, electricity, drainage and roads have already been provided in the rural area but the existing infrastructure facilities are grossly inadequate and need to be strengthened in view of the over-increasing demand of the rural areas. For providing infrastructure facilities in the rural areas, more emphasis would be laid during the 8th Five Year Plan to achieve the targets of various sectors in the rural area of Delhi. In order to develop and maintain the existing infrastructure facilities, a provision of Rs. 160 lacs under 8th Five Year Plan and Rs. 29.00 lacs have been kept for 1992-93.

3. Commercial Centres & Work Centres—(Rs. 80.00 lacs)

Construction of commercial centres in the rural areas is also essential. Under this programme, more emphasis would be laid on the development of different types of centres viz. District Centres, Community Centres, Local Shopping Centres so as to meet the day-to-day requirement of the villagers. A specific provision of Rs. 80 lacs has been approved under the 8th Five Year Plan to meet the expdt. of the above activities. For 1992-93 Rs. 27 lacs have been approved.

4. Construction of Sulabh Sauchalaya—(Rs. 150 lacs)

It has been decided to construction Sulabh Sauchalaya in several villages which do not have this facility.

An amount of Rs. 93 lacs has been kept under the Capital Head under the Annual Plan 1992-93 to construct about 1500 units in the various villages in Delhi. Approved outlay for the 8th Five Year Plan is Rs. 150 lacs. The scheme will be reflected in the R D sector w.e.f. 1992-93.

5. Protection/fencing of Gaon Sabha Land—(Rs. 600 lacs)

The proposal for fencing of Gaon Sabha land has been under consideration for the past many years. The fact is that large areas of Gaon Sabha land are lying vacant. These pockets/areas require immediate protection. Accordingly, fencing of Gaon Sabha land has been included in the 8th Five Year Plan. To protect about 500 acres of land in various villages in the UT of Delhi will be covered. A provision of Rs. 600 lacs has been kept in the 8th Plan which includes Rs. 62 lacs for 1992-93.

6. Community facilities and Development of Panchayats—(Rs. 1035.00 lacs)

Department of Panchayat of Delhi Administration has prepared a few schemes for the socio-economic development of rural areas in the Union Territory of Delhi. The scheme has been specially designed to provide facilities viz., Chaupals for SC/ST, Panchayat Ghars, repairs of Village Wells and distribution of house sites to SC/ST. Public and semi-public facilities like construction of play grounds, stadia, open spaces, work centres etc.

Important targets proposed to be achieved under the scheme during 8th Plan period are as under :—

S. No.	Programmes/Activities	Annual Plan Targets Unit 1992-93		8th Plan Targets
1	2	3	4	5
1.	House hold Industries (Mini Industrial Estates)	Nos.	5	25
2.	Infrastructural facilities, Const. of roads, Water Supply, Electricity etc.	Nos.	40	100
3.	Commercial Centres and Works Centres	Nos.	5	25
4.	Construction of Sulabh- Suachalya	Nos.	1500	5000
5.	Fencing of Gaon Sabha Land	Acre	100	500
6.	Community Facilities Deve- lopment of Panchayat			
	(i) Panchayat Ghars	Nos.	10	50
	(ii) Chaupals for SCs	Nos.	10	50
	(iii) Dev. of Village Wells	Nos.	30	100
	(iv) Primary, Middle, Sec. School	Nos.	25	50
	(v) Others construction of Stadia, Vyamshala, Dev. of Cremation ground etc. etc.	Nos.	4	10

The services of existing staff available under the various units of the Development Department will be utilised initially, but the following posts will have to be created so as to ensure proper implementation and achievements of the objectives of the scheme during the 8th Five Year Plan periods :—

S. No.	Description	Pay Scale Rs.	No. of Posts
1.	Director (Rural Dev.)	3700-5000 +300	1
2.	Dy. Director (Rural Dev.)	3000-4500	1
3.	Admn./Accts. Officer	2375-3500	1
4.	Head Clerk	1400-2300	1

5. Statistical Asstt.	1400-2300	1
6. U.D.C. (Block-wise)	1200-2040	5
7. Stenographer, Gr. III	1200-2040	2
8. L.D.C. (Block-wise)	950-1500	5
9. Driver	950-1500	2
10. Peon	750- 940	3
		22

It is also proposed to provide functional vehicles for collection of data and information and the supervision of various activities in the rural areas.

Till such time, a separate building is constructed staff would be accommodated in the existing building of the Development Department.

It is also proposed to set up an integrated rural development board to execute works in due course of time.

II. Land Reforms :

7. Consolidation of Holdings—(Rs. 35 lacs)

Most of the expenditure is meant for the salary of staff under this scheme. A proposal for creation of 21 posts has been approved by Finance Department and is at the final stage. A sum of Rs. 35 lacs has been kept under this scheme for which breakup is given as under :—

(a) Salary of Staff	33 lacs
(b) Machinery equipment	2 lacs

Physical Achievement :—Out of a total of 82 villages identified for carrying out consolidation operations, work in 3 villages has been completed in 1991-92. It is proposed to take up and complete the work of consolidation in the remaining 79 villages during the Eighth Five Year Plan subject to availability of requisite staff. The bifurcation of villages to be taken for consolidation (year-wise) is given as under :—

Year	No. of Villages to be undertaken for consolidation
1992-93	10
1993-94	12
1994-95	15
1995-96	20
1996-97	22
	79

10 villages have been earmarked for completing consolidation work during the first year. During the year 1993-94 the work is proposed to be completed in another

12 villages as the field staff to be recruited for the purpose will get training during the first year. In the subsequent years i.e. 1994-95, 1995-96 and 1996-97 the target to complete this work has been fixed in 15, 20 and 22 villages respectively.

8. *Modernisation of Land Records in Delhi—(Rs. 5 lacs)*

A sum of Rs. 5.00 lacs has been kept under this scheme which will be utilized for micro-filming of the old existing revenue records to preserve it for a longer period. The revenue record has become brittle and is decaying due to passage of time and it is very much necessary to preserve it through micro-filming.

III. **Rural Energy :**

Delhi was selected as one of the 7 states in the country where the Planning Commission had initiated the Intergrated Rural Energy Pilot Programme. In Delhi the programme was started in 1983-84 in Alipur Block. After seeing its success, the programme was extended to all the five blocks and in the urban areas of Delhi. Initially, two schemes viz. Integrated Rural Energy Programme and Integrated Urban Energy Programme were implemented in the 7th Plan period and various items of non-conventional energy under these schemes were promoted.

Besides these two schemes, the Agency has also implemented 3 more schemes during the 7th Plan.

- (a) Plying of Battery Buses
- (b) Sanitary Landfill Scheme
- (c) IREP Training Centre, Bakoli

These schemes were incorporated in the middle of 7th Plan. Energy Plantation scheme has been introduced for the first time during 1990-91.

DEDA's integrated Rural Energy Programmes are covered under Rural Development Sector, while Urban Energy Programmes are covered under Energy Sector.

9. *Integrated Rural Energy Programme (IREP) by DEDA—(Rs. 225 lacs)*

The Integrated Rural Energy Programme (IREP) was initially started in Alipur Block and after its successful implementation and adoption by the villagers, the same has been extended to the other four Blocks of the Union Territory during 1984-85. As the programme was new, gadgets have been distributed on subsidy, and demonstration of various devices have been arranged at various important villages. The kind of activities that have been undertaken in the I.R.E.P. are installation of biogas, installation of wind mill, sale of solar cookers, installation of Institutional & Domestic solar water heating systems and installation of Improved Chulhas.

During the 7th Plan Rs. 215.93 lacs were provided and Rs. 225.43 lacs have been spent. During 1991-92 against the approved outlay of Rs. 40.00 lacs, Rs. 32.97 lacs have been spent and the following targets were achieved :

S. No.	Name of Item	Target for 1991-92	Achievement
(a)	Biogas	20	17
(b)	Solar Cooker	1,000	317
(c)	Improved Chulha	15,000	18,670
(d)	Wind Mill	5	5

Item-wise details of various items covered under this scheme are as follows :—

(a) *Installation of Biogas Plants*

Under this scheme Biogas Plants are being installed at the sites of private households. The scheme, of late, has not been very popular as the rural area is diminishing with increasing urbanisation. The villagers are using efficient types of cooking fuel like L.P.G. Kerosene, stoves, etc. In spite of that the Agency has set up 337 Nos. of Domestic Type Biogas Plants in the U.T. of Delhi. During 1991-92, 17 Nos. of Biogas Plants have been installed.

In addition to the installation of domestic type Biogas Plants, the Agency has constructed some Community Type Biogas Plants in its various Energy Complexes. The details of the same are as follows :—

Name of site	Capacity of Biogas Plants
1. Kanganheri Energy Complex	2 x 60 cum + 2 x 16 + 1 x 10 cum
2. Palam Energy Complex	2 x 60 cum + 2 x 10 — 1 x 8 cum
3. Rewlakhapur Energy Complex	2 x 60 cum
4. Libaspur Energy Complex	4 x 10 cum
5. Gazipur Energy Complex	5 x 140 cum

One more Biogas Plant of the capacity 5 x 140 cum has recently been taken over by DEDA at Gazipur which was constructed by D.D.A. for Deptt. of Non-conventional Energy Sources, Govt. of India. Out of total 400 Nos. envisaged from such plans, 116 connections have been given to various beneficiaries at different sites. Beneficiaries are being identified for full capacity utilization of these plants.

Keeping into consideration, the urbanization of the rural area of Delhi, a target of 70 Nos. Domestic Biogas Plants have been fixed for the entire 8th Plan (1992-97) and target of 15 has been fixed for Annual Plan 1992-93. For Annual Plan 1992-93 Rs. 1.00 lac is required as Delhi Admn. subsidy.

(b) *Wind Mill*

In order to promote and encourage use of water pumping wind mill, the Deptt. of Non-conventional Energy Sources had launched a nation wide demonstration programme. In order to evoke a larger user response and to create awareness amongst the rural masses of Union Territory of Delhi, the programme of water pumping wind mills was taken up by DEDA during 1983-84.

In the 7th Plan, DEDA had installed 81 Nos. of wind mills in rural as well as in the urban areas of Union Territory of Delhi. The project on wind mills has been taken up with a view to save fuel and electricity, particularly in the rural areas. The wind mills which were installed at the sites are mainly used for minor irrigation and drinking water purposes. In addition to this 3 Nos. of Improved Wind Generators of different capacities & 4 Nos. of wind chargers had also been installed at various sites in the U. T. of Delhi.

Proposal for VIII Five Year Plan 1992-97 & Annual Plan 1992-93 :— For the Annual Plan 1992-93, a target of 5 nos. of wind mills of modified versions has been fixed and for the entire VIII Plan a target of 30 nos. of wind mills has been fixed which are to be installed in the rural areas.

Financial implications :—For the year 1992-93, there is a proposal of Rs. 1.15 lacs to meet the requirement of subsidy, spares, maintenance of given targets and for the previous years installations.

Year	Phasing of targets	Targets
1992-93		5
1993-94		7
1994-95		6
1995-96		6
1996-97		6
		30

During the 7th Five Year Plan, the Deptt. of Non-conventional Energy Sources had provided the Central subsidy as full cost of wind mill, erection charges, transportation charges to the site, maintenance charges for the year and 10% supervision charges to the Agency. For civil work (foundation & footing) and boring work, the cost was shared by Delhi Admn. and the beneficiary in the ratio of 40:60. For the VIII Five Year Plan a provision for financial assistance has been made on the above pattern to D.N.E.S. The subsidy pattern can only be changed if D.N.E.S. will make any change in the grant/subsidy to be released for the VIII Five Year Plan and the Annual Plan 1992-93.

(c) Improved Chulha Programme

This programme was started by D.N.E.S. in order to reduce drudgery of rural housewives and to save fossil fuels. This programme was introduced in Delhi in 1984-85.

Under this project various models of Improved Chulha (fixed/portable) have been approved by the Deptt. of Non-conventional Energy Sources which are being demonstrated and propagated in the entire Union Territory of Delhi through this Agency. There is a saving of 20-30% fuel in usage of these chulhas. The Improved Chulha programme is also a part of the new 20-point programme and the minimum needs programme of the Government of India.

During the 7th Five Year Plan, DEDA has implemented and propagated this scheme in rural as well as urban areas of Delhi and installed/sold 81,558 nos. of both fixed & portable chulhas.

VIII Five Year Plan & Annual Plan 1992-93 :—For the VIII Plan 1992-97, a target of 75,000 nos. of fixed chulhas and 25,000 nos. of portable chulhas of improved version have been fixed. For the Annual Plan 1992-93, a target of 15,000 nos. fixed chulhas and sale of 5000 nos. of portable chulhas have been fixed.

Financial Implications :—For the implementations of the improved Chulha Programme, D.N.E.S. is providing 100% cost of the material and Rs. 5/- per chulha as construction charges in case of fixed chulhas and is providing 50% subsidy to general caste and 75% subsidy to SC/ST persons on portable chulhas. In addition to that the Agency is bearing construction charges @ Rs. 10/- per chulha out of a total cost of Rs. 15/- per chulha (Rs. 5/- DNES share and Rs. 10/- DEDA share). The amount of Rs. 10/- per chulha is to be borne by the beneficiary but as we are implementing the programme mostly in the J. J. clusters/villages, no amount is being charged from the beneficiary towards the chulhas.

Rs. 7.50 lacs is need for the 8th Plan and Rs. 1.50 lacs for the Annual Plan 1992-93 to meet construction charges @ Rs. 10/- per chulha for fixed chulhas.

(d) *Solar Cooker*

Solar cookers not only help in the preparation of our daily meal without the use of any conventional fuel but also preserve nutrition value of the food.

The implementation of the solar cooker programme was taken up by this agency at the instance of D.N.E.S. and Planning Commission from 1983-84 and since then about 18000 Nos. of solar cookers have been sold in the rural and urban area of the Union Territory of Delhi. To generate awareness in the public the system of live demonstration and practical display was also adopted in addition to advertisement & publicity.

Subsidy Pattern :—Solar cookers are made available to the public on less than 50% of its original cost and the remaining amount is met out from the subsidy provided by D.N.E.S. and Delhi Admn. Presently on each solar cooker there is a central (D.N.E.S.) subsidy of Rs. 150/- and the Delhi Admn. subsidy is 40% of the balance of the cost of the cooker.

Target for 8th Plan 1992-97 and Annual Plan 1992-93 :—In the 8th Five Year Plan 1992-97, a target of selling 2500 solar cookers has been fixed under the Integrated Rural Energy Programme and a target of 500 solar cookers has been fixed for the Annual Plan 1992-93.

Maintenance of Photovoltaic systems :—For maintaining the existing solar photovoltaic street lights, water pumps, power plant an amount of Rs. 15 lacs will be required for the 8th Plan 1992-97 and Rs. 1 lac are required for Annual Plan 1992-93.

The details of the posts are as follows :—Staff required for 8th Plan 1992-97 & Annual Plan 1992-93 are :

S. No.	Name of post	No. of Posts	Pay-Scale
1.	Asstt. Engineer (C)	2	2000-3500
2.	Jr. Engineer (Civil)	4	1400-2300
	(Mech.)	2	
	(Elect.)	1	

3. Accountant S.A.S.	1	1640-2900
4. Investigator	2	1200-2040
5. Stenographer	1	1200-2040
6. UDC/Jr. Accountant	2	1200-2040
7. Demonstrator	10	950-1500
8. L.D.C.	5	950-1500
9. Work Asstt. (Civil)	6	950-1500
10. Mechanic/Operator	5	950-1500
11. Fitter	1	950-1500
12. Electrician	2	950-1500
13. Plumber	5	950-1500
14. Driver	8	950-1500
15. Peon/Helper	8	750-940
16. Chowkidar	5	750-940
	70	

The following new posts are also proposed to be created during Annual Plan 1992-93 and will be continued during 8th Five Year Plan :

S. No.	Name of Post	No. of Post	Pay Scale
1.	Data Entry Operator	1	1400-2300
2.	Chowkidar	2	750-940

The detail of Rs. 35 lacs provided under the IREP during 1992-93 and subsidy component which will be provided on various gadgets under the scheme will be as follows :

Subsidy :

S. No.	Name of Item	Target	Subsidy rate	Total subsidy
1.	Biogas	15	@ Rs. 6800	1.00 lac
2.	Wind Mill including repair	5	20,000	1.15 lacs
3.	Solar Cooker	500	320	1.60 lacs
4.	Improved Chulha (Fix)	15000	10	1.50 lacs
5.	Subsidy on PV System & Agriculture			18.75 lacs
6.	Salary			11.00 lacs
				35.00 lacs

Mahatma Gandhi Institute of Integrated Rural Energy Planning & Development at Bakoli—(Rs. 125.00 lacs)

Steady growth in population as well as desire for better quality of life is putting more and more pressure on exploitation of available energy resources especially commercial ones, while studies on available energy potential show that these are not going to last for more than 100 years or so. Since more than 89% of the population still lives in rural areas and have low affordability better management of available resources through planned energy supply for rural sector, becomes imperative to meet the energy demand of India's developing economy. In view of the need for Planned energy supply for over all economic development of the rural sector, the planning Commission has initiated the Integrated Rural Energy Programme (IREP) aiming at developing capabilities in the states/UTs for developing area based plans and implementing the same. Professional approach for result oriented planning and programme implementation needs trained manpower and keeping this in view Planning Commission in collaboration with Delhi Administration has set-up Mahatma Gandhi Institute of Integrated Rural Energy Planning & Development (MGIIREPD) at Bakoli, Alipur Block, Delhi. It started functioning in March, 1990. The Institute was inaugurated by Sh. R K. Hegde, Former Deputy Chairman, Planning Commission.

Objectives of the Centre :

1. To promote the ideals of Mahatma Gandhi for a holistic and human approach to rural development and in that context to promote the integrated approach for sustainable energy planning projects and programmes for rural development;
2. To provide training and research and development facilities for the planning and implementation for the integrated rural energy planning programmes;
3. To undertake as well as to organise and coordinate research and development facilities for hardware and software activities or integrated rural energy planning, projects and programmes and other related activities of rural development;
4. To impart training in the planning and implementation of integrated rural energy programmes to trainers as well as to administrators, experts, specialists, field and operational personnel, non-official groups, bodies and individuals working at different levels including national, state, district, block and village levels;
5. To establish data base in rural energy consumption pattern, demand and supply and technologies in different micro-regions of the country and to utilise this data base for training as well as inputs in the rural energy planning process;
6. To develop computer models and computer software facilities for compiling of data base on rural energy consumption pattern as well as for preparation and implementation of micro and macrolevel integrated rural energy planning projects and their monitoring and evaluation.
7. To develop facilities for production of material for community participation for extension methods, community and people's participation through interaction and co-ordination with various organisations, panchayats and other official and non-official groups, bodies and individual beneficiaries;

8. To undertake research and development programmes for planning, implementation and management systems including-use of data bases and delivery systems for energy of rural development and related aspects;

9. To establish linkages with various institutions in the country working on different aspects of rural energy including planning and implementation, technologies, computer modelling, rural extension and communication techniques among others so as to absorb inputs from these various sources for preparation and dissemination of training material and also develop and participate in a network of institutions on rural energy planning and development in the country;

10. To establish and develop facilities and methods and technologies suitable for dissemination in the rural areas of rural energy and through the integrated rural energy programmes for efficient use of energy;

11. To design and implement various types of studies in the hardware and software as well as on various social, economic, agricultural and voluntary establishments related to rural energy planning and integrated rural development;

12. To organise training courses in rural energy for students and trainees of various categories, coordination and participation with various academic and other institutions working in this and related areas;

13. To design and develop educational programmes in the areas of integrated rural energy and rural development, and rural planning and management, and for this purpose coordinating with suitable universities.

14. To develop as a "Center of excellence" in the field of integrated rural energy planning and development; in that context develop and carry out such other activities as are in keeping with the broad objectives of the Society as outlined above.

Training and R & D :—Institute conducts training programmes/seminars/Workshops for IRE Programme personnel as well as state and Central Govt. officials directly or indirectly involved in IRE Programme. These programmes are need based and developed keeping in view the knowledge and skills required for planning, implementation, coordination and management at different levels under IREP. Centre's own faculty plans the programmes and design the course contents in consultation with Rural Energy Division, Planning Commission. Apart from coordinating training programmes and imparting training, faculty is also involved in R & D work including development of new energy devices, modifications in the existing technologies based on feed-back from the beneficiaries and evolving new models/systems on programme implementation, management and monitoring. Regular training programmes would be conducted for IRE Programme personnel and who are indirectly involved in implementation of this programme. List of programmes conducted upto Aug. 1992 and to be conducted upto March 1993 is given in Annexure—I. Apart from training programmes, R & D projects would also be undertaken for which mechanical workshop would be developed in this plan period. As R & D is based on field problems the following projects would be undertaken/continue during this plan period :—

1. Study of energy consumption pattern in IREP blocks.
2. Data generation on various energy options.
3. Design and development of prototype hybrid power plant for rural areas.
4. Assessment and impact studies of renewable energy devices.

Planning Unit :—This unit will act in consultation with the Planning Commission to assist in collection & analysis of data, preparation of reports and conducting studies.

Computer Centre :—At present this Centre is equipped with one PC/AT-386, with one dump terminal. The main activities of the Centre are data collection and analysis, development of software, programming for rural energy and other projects taken-up by the institute. As the institute conducts training programmes in computer modelling, there is a need to expand this facility. It is planned to add one more PC/AT-386 with four terminals each in the computer centre. Terminals would also be provided in two class rooms alongwith projection facilities.

Mass Communication & Extension :—This unit is set-up for documentation, information dissemination and mass communication in the areas of energy planning, energy conservation, appropriate technology, environmental protection etc. The main activities include planning, designing, production and supply of documents, publication designing and development of audio-visual aids etc. "Journal of Rural Energy" and News Letter being published will continue in this plan period. Proceedings of all training programmes conducted by the institute will be published. Educational video films on various aspects related with rural energy would be produced. Exhibitions and demonstrations are regular programmes under Extension. Infrastructure for arranging exhibitions would be developed including exhibition pannels, working models, TV & VCR etc. during the plan period.

The following posts are likely to be created during the 8th Five Year Plan (1992-97) :—

ADMINISTRATION :

Director	1	4500-7300
Dy. Director (F)	1	3700-5000
Admn. Officer	1	2200-4000
Office Asstt.	2	1400-2300
LDC (F ₂)	4	950-1500
Steno-typist	2	1200-2040
Store Keeper	1	1200-2040
Staff Car Driver (F ₂)	3	950-1500
Receptionist/Telephone Oprt.	1	1400-2600
Daftary	1	750-940
Waterman/Sweeper	4	750-940
Chowkidar (F ₂)	5	750-940
Peons	4	750-940

ACCOUNTS :

JAO	1	2000-3500
Accounts Asstt.	2	1400-2300

LIBRARY :

Librarian	1	1640-2900
Library Attn. (F)	2	1200-2040

HOSTEL & GUEST HOUSE :

House Keeper (F)	1	1640-2900
Linen Asstt. (F)	1	1200-2040
Head Cook (F)	1	1200-2040
Asstt. Cook (F ₃)	5	950-1500
Kitchen Mate (F ₂)	3	750-940
Room Attn. (F)	5	750-940
Masalchi	2	750-940

MAINTENANCE & HORTICULTURE :

A. E. (F)	1	2000-3500
J. E.	2	1400-2300
Carpenter/Electrician/Mason/ Plumber	2	950-1500
Horticulture Asstt.	1	1640-2900
Mali	2	950-1500
Beldar (F)	15	750-940

FACULTY :

Asstt. Professor (F ₁)	3	3000-5000
Research Officer (F ₁)	2	2200-4000
Research Asstt.	3	1640-2900
Workshop Incharge Technician	1 2	1640-2900 950-1500

PLANNING UNIT :

Research Officer	1	2200-4000
Research Asstt.	1	1640-2900

COMPUTER :

Asstt. Professor/Incharge	1	3000-5000
Data Entry Operator (F)	2	1640-2900

COMMUNICATION UNIT :

Information Scientist	1	2200-4000
Research Associate	1	2000-3500
Asstt. Editor	1	2000-3500
Artist	1	1640-2900
Audio Visual Operator	1	1200-2040
Photostat/Cyclostyling Oper.	1	950-1500

'F'—Posts labelled 'F' have been created and filled.

1.2 COOPERATION

Schemes for the development, promotion and propagation of the Cooperative Movement in Delhi are included under this sector. Development of cooperatives has been envisaged as a significant strategy to build strength in people with limited means. The Cooperative Deptt. is responsible for promoting Cooperative Societies and consolidating the Cooperative Movement in Delhi.

7th Plan 1985-90 and Annual Plans 1990-91 and 1991-92

The following table indicates the approved outlay vis-a-vis the expenditure incurred under this sector during the 7th Plan 1985-90 and the Annual Plans 1990-91 and 1991-92 :—

Plan	(Rs. in lacs)	
	Approved Outlay	Expenditure
7th Plan 1985-90	294.00	232.38
Annual Plan 1990-91	78.00	39.19
Annual Plan 1991-92	60.00	37.59

The reasons for the shortfall were mainly due to non-creation of posts, slow progress of some of the schemes like opening of Showrooms for Handloom sector etc.

In physical terms, long term loans worth Rs. 86 lacs and short term loans of Rs. 40 lacs were advanced by the Delhi State Cooperative Bank during 7th Plan. During 1990-91 Rs. 23 lacs and Rs. 11 lacs were advanced respectively. The corresponding figure during 1991-92 was Rs. 3 lacs and Rs. 22 lacs. During the 7th Plan period consumer goods worth Rs. 533.43 crores were sold through Urban Consumer Cooperative Stores. The corresponding figures during 1990-91 and 1991-92 were Rs. 128.75 crores and Rs. 152.03 crores respectively.

The following table indicates the growth of Cooperative Movement in Delhi during this period :—

Category of Co-op. Societies (Regd.)	(As on 31st March)					
	No. of Co-op. Societies			Membership (Lakh Nos.)		
	1985*	1990	1991	1985*	1990	1991
Industrial	1299	1680	1385	0.20	0.23	0.15
Urban (T&C)/Banks	1011	1087	1156	4.32	4.85	6.98
Consumer Stores	685	820	810	2.25	2.48	2.48
Housing	229	229	225	0.33	0.33	0.32
Group Housing	1998	2018	2012	2.22	2.40	2.40
Package (Rural)	758	801	697	0.52	0.53	0.51
Multipurpose	—	—	4	—	—	—
TOTAL :	5980	6635	6289	9.84	10.82	12.84

Category of Co-op. Societies	Share Capital			Deposits		
	(Rs. in lacs)					
	1985*	1990	1991	1985*	1990	1991
Industrial	200.2	204.2	95.5	687.3	688.2	337.3
Consumers Stores	147.3	162.6	163.1	34.7	33.6	33.6
Urban (T&C)	970.0	1066.7	2547.1	3946.0	4358.8	7621.3
Housing	42.8	42.4	41.8	215.0	215.0	213.0
Group Housing (P)	230.0	248.2	248.5	160.5	N.A.	34022.7
Package	46.8	48.6	45.4	7.8	8.2	6.5

P—Provisional
*As on 30th June.

8TH FIVE YEAR PLAN 1992-97 & ANNUAL PLAN 1992-93

Strategy for the 8th Five Year Plan

The strategy of the 8th Five Year Plan will more or less remain the same as adopted during the 7th Five Year Plan/Annual Plan 1990-91 & 1991-92 period. However, on the basis of past experience some new programmes are proposed to be taken up during the 8th Five Year Plan period.

Keeping in view the growth of registered societies and the requirements of Cooperative Societies during the 8th Five Year Plan, the following strategies are formulated :—

1. The main thrust in Delhi is on the Housing Sector. Keeping pace with the needs of its citizens and pressure on land, the concept of Group Housing Coop. Societies was introduced. More than 2,000 Group Housing Societies have been registered. In order to advance loans for construction purposes to the Coop. Societies as well as the C ops. of slum dwellers it is proposed to strengthen the share capital base of the Delhi Coop. Housing Finance Society Ltd. (DCHFS), as an apex level Coop. Finance Institution. The details are reflected in the Housing Sector.
2. In the industrial sector, the Handloom Coops. which are mostly formed by the weaker section of the society will be provided special attention by providing financial assistance.
3. The overall objective will be to strengthen the Coop. Societies under all sectors and also to organise new Coop. Societies.
4. In the rural sector, the strategy is to accelerate the distribution of short term, medium and long term loans through the Delhi State Coop. Bank to the agriculturists for their agricultural operation.
5. The training requirements of the Office bearers/members of the Coop. Societies and the staff employed by them will be taken care of. This programme will be run through Cooperative Education Fund.

6. In order to encourage women to come forward and form Coop. Societies, separate schemes to provide financial assistance will be formulated.
7. To meet the requirements of consumption loan to meet the expenses of marriage, education, medical, religious ceremony/funeral ceremony and birth ceremony of the SC/ST and other weaker section of society more funds at reasonable rate of interest will be provided. The outlay for the scheme Agricultural Credit stabilisation fund is meant fully for the benefit of Rural people apart from other schemes where the benefit accrues indirectly.

Keeping in view the above facts, the provisions approved for the 8th Five Year Plan 1992-97 and the Annual Plan 1992-93 as per broad heads are as follows :—

	(Rs. in lacs)	
	8th Five Year Plan (1992-97)	Annual Plan 1992-93
1. Direction & Admn.	30.00	9.10
2. Research & Evaluation	10.00	2.00
3. Asstt. to Credit Coop. Societies	72.00	13.00
4. Asstt. to other Coop. (Consumer)	4.50	0.90
5. Agriculture Credit Stabilisation Fund	2.00	1.00
6. Other Cooperatives	131.50	24.00
Total :	250.00	50.00

The following table indicates the physical target approved for the 8th Plan and the Annual Plan 1992-93 :—

S. No.	Item	(Rs. in crores)	
		8th Plan (1992-97) Targets	Annual Plan 1992-93 Targets
1	2	3	4
1.	Short-term loan advances	2.25	0.40
2.	Medium term loan advances	0.25	0.05
3.	Long term loan advances	0.50	0.10
4.	Retail sale of fertilisers	1.25	0.25
5.	Agriculture products marketed by Coop.	1.00	0.20
6.	Retail sale of consumer goods by Urban Cons. Coop. Stores	750.00	150.00
7.	Retail sale of consumer goods through Coop. in Rural areas	7.00	1.25

The scheme-wise details for the 8th Five Year Plan 1992-97 and the Annual Plan 1992-93 are as follows :

1. Direction and Administration (Rs. 30.00 lacs)

To ensure smooth functioning of various sections it is proposed to strengthen various units adequately. Keeping in view the sanctioned strength and additional work load to be generated during the coming years and on the basis of realistic appraisal of the schemes, it is proposed to create/strengthen the various section/units accordingly. The work load study of the existing staff is being carried out by Administrative Reforms Deptt. The final picture will emerge only after the study. At present a token provision is made for the scheme. More details and actual requirements of various posts will be worked out later on at the time of implementation of the scheme or additional work load generated in the units due to registration of Coop. Societies, allotment of land to the societies or due to any other reasons. However, at this stage only a basic minimum staff has been indicated. The section-wise details are as under :—

(I) *Strengthening of Group Housing & House Building Sections*

The number of working Group Housing Coop. Societies and House Building Coop. Societies registered with the Coop. Deptt. by the end of March, 1992 is 1970. The Group Housing Societies numbering about 1415 were registered during the year 1983 and the DDA has not yet provided the land for construction of flats to the societies. It is hoped that land to some of these societies is likely to be made available shortly. Once the land is allotted to these societies, the work load in respect of the enrolment, expulsion, fixation of MCL, dispute between the members and management and legal cases are likely to increase.

At present no senior post such as that of Joint Registrar and Deputy Registrar has been sanctioned for this section. The work of the Group Housing branch is being handled by an Officer taken from other branch.

To cope up with the increase in the work of this branch it is proposed to strengthen the branch by creating the following posts during 8th Five Year Plan period and the Annual Plan 1992-93 :

S. No.	Name of the Post	Pay Scale Rs.	No. of posts
1.	Joint Registrar	3700-5000	1
2.	Deputy Registrar	3000-4500	1
3.	Asstt. Registrar	2000-3500	1
4.	Stenographer	1200-2040	3
5.	L. D. C.	950-1500	2
6.	Peon	750-940	3
7.	Bailiff	800-1150	1
8.	Driver	950-1500	1
			13

(II) Setting up of an Election-Cell

The Coop. Societies are under obligation as per the provision of the Delhi Coop. Societies Act, 1972 to conduct elections. In case the Coop. Societies do not hold election the Deptt. issues requisition notice for conducting elections etc. and then gets the election conducted by appointing an Election Officer of the Deptt. This is a stupendous task and requires a full time Officer to closely monitor the holding of elections by the societies.

At the moment no separate cell is sanctioned for this purpose. It is proposed to create the Election-Cell with the following staff, during 8th Five Year Plan period 1992-97 :—

S. No.	Name of the Post	Pay Scale in Rs.	No. of posts
1.	Asstt. Registrar	2000-3500	1
2.	Inspector Gr. II	1400-2300	3
3.	Stenographer	1200-2040	1
4.	L.D.C.	950-1500	2
5.	Peon/Messenger	750-940	1
			8

(III) Setting up of an Arbitration Cell

As per section 60 of the Delhi Coop. Societies Act, 1972 the members of the Coop. Societies have the right to settle the dispute through Arbitration. 308 Cases are pending for Office hearing and 452 cases with Arbitrators, as on 31-3-92. Since there are no separate posts for Arbitration work, it is presently looked after by the Officers of the Deptt. who are also incharge of many other branches. With the increase in the number of Coop. Societies particularly in the Group Housing Sector, the disputes U/S-60 of Delhi Coop. Societies Act, 1972 have increased manifold. It is not possible for the already over burdened Officers to dispose off the petitions under the act in an efficient manner. Hence, it is proposed to create a separate cell to handle these cases to provide quick relief to the petitioners with the following staff during 8th Five Year Plan period :

S. No.	Name of the Post	Pay Scale in Rs.	No. of posts
1.	Joint Registrar	3700-5000	1
2.	Asstt. Registrar	2000-3500	4
3.	Head Clerk	1400-2300	1
4.	Stenographer	1200-2040	5
5.	L.D.C.	950-1500	5
6.	Peon/Messenger	750-940	5
			21

(IV) Strengthening of Administrative Branch

(A) Keeping in view the concern of the Govt. of India about environment, Deptt. has been endeavouring to create healthy environment in and around the Deptt. by planting potted plants which require constant attention. It is proposed to create one post of Mali (Rs. 750-940) during the 8th plan period.

(B) Setting up of a Library Unit

There is no Librarian in the Coop. Deptt. The number of books as well as Newspapers/Magazines of current interest and in the field of Coop. are increasing day by day. But in the absence of trained Librarian, the Library is not being run properly. So, it is proposed to create one post of Librarian in the scale of Rs. 1400-2300 and one attendant in the scale of Rs. 750-940.

(C) Strengthening of Legal Cell

The number of legal cases are increasing rapidly. It is likely that these will further increase due to allotment of land to a large number of Group Housing Societies as legal matters regarding membership and other related issues are likely to increase rapidly. Only one post of Law Officer in the scale of Rs. 2000-3500 was created during the 7th Five Year Plan and it is yet to be filled up. However, no supporting staff has been provided with this post. Accordingly it is proposed to strengthen this cell as under :—

S. No.	Name of the Post	Pay Scale Rs.	No. of Posts
1.	Legal Asstt.	1640-2900	2
2.	Stenographer	1200-2040	1
3.	L.D.C.	950-1500	2
4.	Bailiff	800-1150	1
5.	Peon	750-940	1
			7

(D) Setting up of a Multipurpose Coop. Societies Unit

The Slum Wing, DDA has taken up developmental work of the slum areas and to organise new multipurpose Coop. Societies with the specific objective of the upgradation of the slum dwellers. The main objective of the proposed New Multipurpose Societies is Housing, as well as to arrange for common watch and ward, insurance of the slum clusters etc. The Model Bye-laws of these types of societies have already been approved.

This is a scheme of "PUNERVAS" for all round developments of the slum dwellers through the organisation of New Multipurpose Coop. Societies. Besides, the Slum Wing of DDA is devising so many schemes for the upliftment of the inhabitants of the slum clusters by providing them financial assistance etc.

More details and actual requirements of various posts will be worked out later on, when the actual workload is generated and assessed.

Under the scheme Direction and Administration outlay of Rs. 30.00 lacs is approved for the 8th Five Year Plan including Rs. 9.10 lacs for the Annual Plan 1992-93.

2. Setting up of an Electronic Data Processing Cell in the Cooperative Department (Rs. 10.00 lacs)

This scheme will be continued during the 8th Plan. During the 7th Plan, the CMC Ltd., completed the system study and System Design of the first phase of computerisation in the Coop. Deptt. This study of the CMC will help the future computerisation plans and it will be handled by the EDP Cell proposed to be set up in the Coop. Deptt. In the absence of any technically qualified staff provided for this scheme, the NIC (a Govt. of India Undertaking) is providing technical guidance at present.

In the first phase, general information pertaining to the society, membership, Assets and Liabilities, Income and Expenditure of the Society, the Audit, Elections and Employment in the society and the profit and loss and taxes of the society has been completed.

During the 8th Five Year Plan, it is proposed to collect statistical information in respect of Phase-II. The computerisation of data would be expanded to include all the relevant tables contained in the "Statistical statements relating to the Coop. movement in India—NABARD as well as the additional requirements of the department.

The Deptt. has already purchased SAT—386 Computer System along with 4 terminals and one printer. In order to run this unit smoothly, it is necessary to have Technically qualified staff. It will further help in bringing more areas of activities of the deptt. under computerisation. It is, therefore, proposed to create the following posts during 8th Five Year Plan :—

S. No.	Name of the Post	Pay Scale	No. of Posts
1.	Programmer	Rs. 2200-4000	1
2.	Data Entry Operators	Rs. 1200-2040	4
3.	Peon/Manual attendant	Rs. 750-940	1

Provision for purchase of Disk, Floppy, Computer Appliances, Printer, Warranty charges for Computer, Paper, Stationery & other expenses etc. is also made under this scheme.

A sum of Rs. 10.00 lacs for the 8th Five Year Plan, including Rs. 2 lacs for the Annual Plan 1992-93 is approved for the scheme.

3. Share Capital to Delhi State Coop. Bank Ltd. (22.00 lacs)

The Bank, functioning as an Apex Institution for Coop. in the Union Territory of Delhi, is directly providing finances to various Coops. and thus acting as a central financing agency. It is providing short-term, medium-term and long-term agricultural

loans and cash credit to different types of societies including weavers, industrial, Group Housing and transport societies. The bank provides banking facilities to the general public of the U. T. of Delhi and caters to the credit needs of all types of societies and individual Agriculturists through a network of its 15 branches and one Land Development Bank. The individual housing loan facility and loan facility for purchase of durable articles like T.V., Fridge, Scooter etc. is also provided by the Bank to the salaried group by enrolling them as nominal members of the bank.

The Govt. has so far subscribed to Share Capital to the extent of Rs. 80.03 lacs. The comparative position of the Bank for the last three years is given below for ready reference.

		(Rs. in lacs)		
S. No.	Particulars	1989-90	1990-91	1991-92
1.	Share Capital	185.88	189.29	190.43
2.	Reserve including Intt. suspense reserve	421.79	447.42	523.93
3.	Deposits	6902.45	7119.04	7170.95
4.	Loans & Advances	2380.76	2703.33	N. A.
5.	Working Capital	8382.68	9186.63	9432.50
6.	Investment in Govt. securities	1523.92	1623.92	N. A.
7.	Advance during the year	225.50	107.16	44.02
8.	Profit	165.20	188.79	216.12

Note :—Share Capital including Nominal Shares.

The bank has also provided credit facilities to the national level institutions like NAFED and All India Handloom Fabrics Marketing Coop. Society Ltd. under NABARD refinance to help the public distribution system. The bank has also started advancing loans to Fair Price Shops for their working capital requirements. Due to rapid urbanisation in the Union Territory of Delhi, the bank is planning to increase its lending business in the weaving, housing and industrial sector by advancing loan, cash credit limits to the handlooms, weaving societies, co.p. group housing societies and industrial coop. societies. In this way, the bank is playing a big role in the production, distribution of essential articles, housing and solving the unemployment problem. It is, therefore, necessary to augment the paid-up share capital of the bank. Accordingly share capital assistance of Rs. 22.00 lacs for the 8th Five Year Plan and Rs 3 lacs for the Annual Plan 1992-93 stand approved

4. Consumption Credit to SC/ST Members (Rs. 50.00 lacs)

The objective of this continuing scheme is to meet the consumption credit requirements of the SC/ST. Consumption Credit is available for purposes like marriage, educational, medical, religious purposes etc. Any SC/ST members of any T/C society or Cooperative bank whose monthly income does not exceed Rs. 2,000/- is eligible for availing this assistance. At present the rate of interest is 10.5% per annum.

The following financial pattern will continue during the 8th Five Year Plan :—

	Rs.
Marriage Expenses	5,000
Educational Expenses	3,000
Medical Expenses	3,000
Expenses for funeral Ceremony/birth ceremony	1,000
Religious ceremony	1,000

The consumption loan will be released to SC/ST member of any Thrift & Credit Co-operative Society/Co-op. Bank functioning in Delhi.

An outlay of Rs. 50.00 lacs for the 8th Five Year Plan including Rs. 10.00 lacs for the Annual Plan 1992-93 is approved for this Scheme.

5. Assistance to Primary Cons. Coop. Stores (Rs. 4.50 lacs)

There are 436 Primary Cons. Coop. Stores working as on 31-3-92. It is proposed to cover stores which have not been provided financial assistance so far and also those newly registered ones, who are desirous of availing financial assistance.

Keeping in view, the financial requirements of the Cons. Coop. Stores, the following pattern of financial assistance has been approved for the 8th Five Year Plan.

	Rs.
1—Share Capital	10,000/-
2—Working Capital Loan	15,000/-
3—Subsidy and Furniture & Fixture	5,000/-
Total :	<u>30,000/-</u>

During the 8th Five Year Plan, financial assistance is proposed to be provided to 15 stores. An amount of Rs. 4.50 lacs is approved for the 8th Five Year Plan including Rs. 0.90 lac for the Annual Plan 1992-93.

6. Agriculture Credit Stabilization Fund (Rs. 2.00 lacs)

The Crops are subject to various natural calamities such as heavy rains, drought etc. In these circumstances, it is essential that short-term loans of members of the Agricultural Societies shall have to be converted into medium-term loans. Accordingly, a sum of Rs. 2.00 lacs as subsidy (33%) and loan (67%) to the Delhi State Coop. Bank during the 8th Five Year Plan to strengthen Agricultural Credit Stabilization Fund is approved. For the Annual Plan 1992-93 the approved outlay is Rs. 1 lac.

7. Financial Assistance to Primary Leather Cooperative Societies (Rs. 2.30 lacs)

The Primary Leather Coop. Societies are provided financial assistance as per following scales approved by the Govt. of India, Ministry of Industrial Development.

	Rs.
Govt. Share Capital	5000/-
Working Capital Loan	10,000/-
Managerial Subsidy	8,000/- (1st year—Rs. 5000/- 2nd year—Rs. 3000/-)

A Primary Leather Co-op. Society gets Rs. 23,000/- by way of financial assistance from the Delhi Admn. It is proposed to assist 2 Leather Co-op. Societies every year, totalling 10 Leather Co-op. Societies during 8th Five Year Plan period.

There are 24 working Leather Co-op. Societies with 686 members. The items manufactured by the societies are Leather wear and footwear, suit cases, belts, other fancy leather goods etc. and these societies are formed by the members belonging to SC/ST category.

The financial assistance is released on the basis of terms and conditions prescribed by the Govt. of India.

A sum of Rs. 2.30 lacs is approved for 8th Five Year Plan which includes Rs. 0.46 lac for the Annual Plan 1992-93.

The entire scheme is covered under Special Component Plan

8. Delhi State Co-op. Industrial Leather Federation (Rs. 1.00 lac)

The Delhi State Co-op. Industrial Leather Federation, an Apex Body of the Primary Leather Societies, has been formed to assist the primary societies in the sale of their products, procurement of raw material like leather, dyes etc. at reasonable rates and to provide them technical assistance. All the members of Primary Leather Societies belong to SC/ST community. Hence, there is need to provide financial assistance to this Federation. Since, this Fed, has recently been formed and this Deptt. has to watch its working for some time more, a token sum of Rs. 1.00 lac is approved for the 8th Five Year Plan. (Share Capital participation Rs. 25,000/-, Working Capital Loan Rs. 65,000/- and Managerial Subsidy Rs. 10,000/-). For the Annual Plan 1992-93 no provision is made for the scheme.

9. Market Development Assistance Scheme (Rs. 113.20 lacs)

This scheme is being implemented in Delhi since 1989-90. The scheme is formulated on the basis of guidelines provided by the Office of Handloom Development Commissioner, M/o. Textiles, Govt. of India. The main purpose of the scheme is to provide assistance to the Handloom Sector linked with the performance of the organisation and also to provide incentives for better performance.

The details of the scheme are as under :

(A) Assistance to State Apex Societies etc.

It is decided to provide 8% of average sale turnover of handloom fabrics, made-ups and garments (excluding Janta Cloth) of State Apex Societies and Handloom Development Corporations as shown in the audited accounts for 3 years preceding the financial year as grant. The assistance, which is to be shared equally by the State & Central Govt., will be provided to the State Apex Societies and Handloom Development Corporation.

The average sales turnover of Handloom Fabrics is estimated at Rs. 2.45 crores and 8% of Rs. 2.45 crores comes to Rs. 19.60 lacs. The Administration's 50% share comes to Rs. 9.80 lacs. Accordingly, the estimated provision for 8th Five Year Plan is estimated at Rs. 49.00 lacs. This is as per 1992-93 estimates.

(B) Assistance to Primary Handloom Weavers Coop. Societies

Assistance, which is to be shared equally by the State and Central Govt. will be provided to the Primary H/L Weavers Coop. Societies.

15% of Cash Credit limit sanctioned by Financial institutions (e.g. Central Coop. Bank, State Coop. Bank, Regional Rural Bank, State Finance Corporation etc.) will be provided to the eligible primary societies of the State.

The Cash Credit limits sanctioned to Primary Coop. H/L societies during the year 1992-93 is estimated at Rs. 170.00 lacs and 15% of this amount comes to Rs. 25.50 lacs of which the Admn. share comes to Rs. 12.74 lacs. Accordingly, the financial assistance on this account during the 8th Five Year Plan period is estimated at Rs. 64.20 lacs.

Utilisation of Assistance

The assistance provided under this scheme may be utilised for any of the following purposes, namely:

- (a) Interest Subsidy;
- (b) Rebate/discount and other consumer incentives on non-janta H/L products;
- (c) Capital/Margin money for setting up of showrooms, godowns, renovation of showrooms etc. ;
- (d) Any other purpose approved by the State and/or Central Govt.

The assistance due to the individual primary societies will be passed on by the State Govt. to the concerned societies.

Out of the assistance so provided to the primary societies under the MDA Scheme, not more than 75% of the amount shall be utilised for item (b) above. The balance amount shall be utilised for other purposes enumerated in the para. The beneficiary primary societies will be required to submit a utilisation certificate to the State Govt. to the effect that the grant was utilised for the approved purposes only. The State Govts. will accordingly submit a consolidated utilisation certificate on behalf of all the primary societies beneficiary organisations through any authority designated for the purpose.

Thus, the total requirement for this scheme (A+B) during the 8th Five Year Plan is Rs. 113 20 lacs and the same amount is approved for the 8th Plan period. The outlay approved for the scheme in the Annual Plan 1992-93 is Rs. 22.54 lacs.

10. Labour Cooperatives (Rs. 3.00 lacs)

At present there are 33 functional Labour & Construction Coop. Societies with 2487 members. These societies are mostly run by the weaker section of the society.

With a view to provide self employment opportunities, it is proposed to provide Financial Assistance by way of Share Capital, Loan and Subsidy in order to strengthen their financial position. It is proposed to assist 10 Labour/Construction Coop. Societies during the 8th Five Year Plan. A society shall be eligible for the following grant of assistance :

Working Capital Loan	Rs. 20,000/-
Share Capital (On equal matching basis)	Rs. 5,000/-
Managerial Subsidy	Rs. 5,000/- (Rs. 3,000/- in the 1st year & Rs. 2,000/- in the 2nd year)

A sum of Rs. 3.00 lacs is approved for the 8th Five Year Plan including Rs. 0.60 lac for the Annual Plan 1992-93.

11. Assistance to Women Coop. Industrial Society (All kinds) (Rs. 2.00 lacs)

The Women Coop. Societies are mainly organised among house hold ladies for the promotion of their economic interest such as tailoring, paper/pickles and other industrial coop. societies. These societies can be made more viable by granting financial assistance as per norms given below.

Share Capital	Rs. 5,000/-
Working Capital Loan	Rs. 10,000/-
Managerial Subsidy	Rs. 5,000/- (Rs. 3,000/- in the 1st year & Rs. 2,000/- in the 2nd year)

It is proposed to assist 10 Coop. Societies during the 8th Five Year Plan at the rate of 2 societies each year. An outlay of Rs. 2 00 lacs is approved for 8th Five Year Plan including Rs. 0.40 lac for the Annual Plan 1992-93.

12. Opening of Show-Room for the Handloom Sector (Rs. 10.00 lacs)

During the 7th Five Year Plan Coop. Deptt. had purchased 6 show-rooms at a provisional cost of Rs. 35.00 lacs from DDA. The interior decoration work of these show-rooms has been completed by DSIDC and these show-rooms have not yet become operational due to certain difficulties. Besides, the DDA has also charged market rate for these show-rooms. At present, the deptt. has decided not to purchase any more show-room.

However, a provision of Rs 10 lacs is made in the 8th Plan for paying the additional cost demanded by DDA. No outlay has been provided for this scheme in the Annual Plan 1992-93.

MINOR IRRIGATION

Irrigation in Delhi mainly depends upon ground water and partially upon surface water. Irrigation from ground water is provided through shallow cavity tube-wells and deep tube-wells, whereas surface irrigation is by way of utilising treated effluent water from existing sewage treatment plants like Okhla, Burari and Keshopur. Delhi also gets water for irrigation purposes from the Western Yamuna Canal system but this is under the control of the Haryana Government. 16340 hectares of land is being irrigated by the Western Yamuna Canal, 4900 hectares by utilising effluent water of existing sewage treatment plants and 44300 hectares from ground water resources [4800 hectares from state tube-wells (220) and about 40000 hectares from private tube-wells (about 14000)].

In the 7th Plan (1985-90) an amount of Rs. 455.14 lacs was invested on Minor Irrigation Schemes. The Minor Irrigation Department incurred Rs. 103.82 lacs in 1990-91 and Rs. 121.31 lacs in 1991-92 on the various programmes.

For the 8th Five Year Plan (1992-97) an outlay of Rs. 800 lacs is approved for this sector which includes Rs. 200 lacs for the Annual Plan 1992-93. During the 8th Plan period, 5180 hectares of additional land will be brought under assured irrigation (by surface-3980 hectt. and ground water-1200 hectares). Statement indicated below gives expenditure during the 7th Plan 1990-91, 1991-92 and outlays for the 8th Plan and the Annual Plan 1992-93 on minor irrigation works/programmes :—

Programme	Edpdr. 7th Plan (1985-90)	Expenditure		Approved Outlay	
		Annual Plan		8th Plan 1992-97	Annual Plan 1992-93
		1990-91	1991-92		
1	2	3	4	5	6
1. Investigation & development of ground-water resources	15.36	—	—	—	—
2. Ground water tube-wells	162.33	14.54	2.04	20.00	3.00
3. Surface water effluent treatment plant	277.45	89.28	119.27	755.00	194.00
4. Stg. of existing irrigation circle	—	—	—	25.00	3.00
Total (Minor Irrigation)	455.14	103.82	121.31	800.00	200.00

Programme/scheme-wise details are as under :—

I. Ground Water

1. *Installation and Improvement of tube-wells in the rural areas of Delhi (Rs. 20 lacs)*

An outlay of Rs. 20 lacs is approved in the 8th Plan for installation and improvement of Govt. tube-wells in the rural areas of Delhi. For the Annual Plan

1992-93 a provision of Rs. 3.00 lacs is approved for the purpose, Under this scheme, the following works/programmes are proposed to be undertaken :—

(a) *Improvement of 50 shallow cavity tube-wells installed under Drought Relief Programme*

During the drought year 1987-88, 50 shallow cavity tube-wells were installed in Alipur and Kanjhawla Blocks. Boring, pump-sets and double fly tents were provided. No distribution system was set up.

It is proposed to convert some of these tube-wells into State tube-wells and to provide RCC pipe distribution system and pump house.

(b) *Shallow cavity tube-wells*

It is proposed to install shallow cavity tube-wells for marginally poor cultivators having less than 5 acres of cultivable land. The tube-wells are proposed to be installed in Alipur and Kanjhawla Blocks as the sub-soil water table is getting lows in these areas.

(c) *Deep tube-wells*

The hilly terrain of Mehrauli Block has ground water in deep cavities. Drought has affected the area since 1985-86. The water table in Najafgarh Block has fallen. Small farmers are, therefore, facing problems. In order to provide relief to such farmers, it is proposed to install deep tube-wells mainly in Najafgarh and Mahrauli Blocks.

(II) *Surface Water—Effluent Irrigation Plants*

Surface irrigation in Delhi relies on treated effluents flowing from the sewage treatment plants at Okhla, Coronation & Keshopur.

2450 hectares are proposed to be irrigated during the 8th Five Year Plan, out of which 750 hectares will be covered during the Annual Plan 1992-93. The detailed write up of the schemes included under this head are as under.

2. *Effluent Irrigation from Keshopur Treatment Plant (Phase III)—(Rs. 500 lacs)*

This is an ongoing scheme. In Aug. 89, Delhi Admn. authorised Rs. 194 lacs to utilise an additional 90 cusecs of treated effluent from Keshopur Treatment Plant. It was proposed to irrigated an additional area of about 1457 hect. of land in Najafgarh Block. The scheme could not make any head-way till March, 88 and the project estimates were revised to Rs. 1051 lacs. This was mainly due to increases in the cost of labour, material, land and change in the alignment of the feeder channel.

This scheme provides for the construction of a head regulator at the off-take point of KTP; 2.3 KM of feeder channel along the right bank of N.G. Drain, contruction of a bridge cum aquaduct across Najafgarh drain and Supplementary drain, construction of 3.6 KM long feeder channel on the left bank of the Supplementary drain; construction of a pump house; a balancing reservoir; distribution tanks; Keshopur Minor; 8 Sub Minors, Cross drainage works, bridge and culverts etc.

Construction of a 2.3 KM feeder channel, along the right bank of NG Drain and the Construction of the Main Distributory and Siphon across Nangloi-Najafgarh Road have been completed. It is proposed to take up construction of a bridge cum aquaduct across NG Drain/Supplementary Drain, construction of a feeder channel on the left bank of the Supplementary Drain from RD-2675 to RD 2665; Construction of a Pump House, a Balancing reservoir and distribution tanks near village Tilangpur Kotla, Construction of Keshopur Minor, Sub-Minors, Culverts and small bridges etc.

An expenditure of Rs. 71.03 lacs was incurred in 1991-92. The scheme is likely to be completed in the year 1994-95. An outlay of Rs. 500.00 lacs for the 8th Five Year Plan 1992-97 and Rs. 149.00 lacs for the Annual Plan 1992-93 has been approved.

3. *Effluent Irrigation system from Coronation Treatment Plant at Burari (Phase-II) (Rs. 35.00 lacs)*

Delhi Admn. approved the extension of the Irrigation system from Coronation at an estimated cost of Rs 45.86 lacs in Feb. 1978. The scheme was revised in 1986 improvements were estimated to cost Rs. 99.70 lacs. The idea was to provide additional irrigation facilities to 1500 Hect. of cropped area. At the moment irrigation is provided to six villages viz. Bhalswa, Nathupura, Burari, Jharoda, Mukund Pur and Kamalpur. It shall be extended to four more villages viz. Ibrahampur, Kushak Khurd, Kadipur and Saleempur.

The expenditure incurred during 1990-92 was Rs. 52.08 lacs. The total expenditure on the scheme on completion is expected to increase the sanctioned cost for which the same is being revised. The scheme is likely to be completed during 1993-94. The approved outlay for 1992-97 is Rs. 35.00 lacs and Rs. 30.00 lacs has been provided for the Annual Plan 1992-93.

NEW SCHEMES :

4. *Effluent Irrigation system in Najafgarh Block (Rs. 200.00 lacs)*

The Najafgarh Drain is a major source of pollution of the Yamuna in Delhi. Diversion of effluent water for irrigation has substantially checked the pollution of the river. It is now proposed to utilise the polluted water of NG Drain from Dhulsiras to Jhatikra Bridge for irrigation. A scheme costing Rs. 496.00 lacs has been formulated and the proposals include construction of a cunnette in the bed of the NG Drain from Dhulsiras to Jhatikra for carrying waste water in the reverse direction, construction of a balancing reservoir and a pump house with a lifting capacity of 60 cusecs. About 1000 Hect. of agricultural land in Najafgarh Block shall benefit by the "Grow More Food Programme" of the Govt. of India. This is a new scheme and is proposed to be completed during the 8th Five Year Plan.

An outlay of Rs. 5.00 lacs was approved for the year 1991-92 but no expenditure was incurred. The approved outlay for the 8th Five Year Plan 1992-97 is Rs. 200.00 lacs which includes Rs. 10 lacs for the Annual Plan 1992-93.

5. *Ground Water Recharge (Rs. 20 lacs)*

The scheme for recharging ground water in Mehrauli Block will cost approximately of Rs. 75.00 lacs. Check bunds and small earthen dams will be constituted in the ravines and rivulets of Asola. Mehrauli Block has been deprived of its share of

ground water due to depleting levels of ground water. Most of the rain water flows out from this hilly terrain, minimising percolation/absorption which is a vital factor in recharge ground water. Most of the tubewells installed by the public as well as Delhi Admn., have dwindling yields. Soakage bunds on various ravines, will spare rain water at suitable locations. This will help the growth of vegetation and wild life in the Sanctuary area. A detailed survey for the identification of sites for these soakage bunds is underway. A detailed project report will be formulated. An outlay of Rs. 20.00 lacs and Rs. 5.00 lacs have been approved for the 8th Five Year Plan 1992-97 and the Annual Plan 1992-93 respectively.

6. Strengthening of existing Irrigation Circle—(Rs. 25.00 lacs)

The existing irrigation circle, controls and supervises the maintenance, execution and planning of surface water and ground water irrigation systems. The Irrigation circle has also been entrusted with a number of other deposit works on behalf of other Departments of Delhi Administration such as creation of bird-cum-wild life sanctuary, improvement of Harijan Basties, construction of Panchayat Ghars and Construction of temporary accommodation for migrants from Punjab at Peera Garhi.

The circle office, is handicapped in planning and monitoring schemes under its charge due to shortage of staff. A scheme costing Rs. 31.55 lacs has therefore, been proposed. Expenditure on salaries of existing staff is charged on Non Plan funds.

The said scheme was cleared by the Joint Technical Advisory Committee for irrigation and flood in its 1st and 2nd meetings held on 24-1-90 and 27-2-90 respectively.

The following posts are proposed under plan :—

S. No.	Name of post	No. of Posts	Scale of pay
1	2	3	4
(A) Technical Staff :			
1.	Surveyor of Works	One	3000-4500
2.	Engineer Assistant	One	2000-3500
3.	Assistant Surveyor of Works	Two	2000-3500
4.	Junior Engineers	Four	1400-2300
5.	Draughtsmen Grade-I	One	1600-2660
6.	Draughtsmen Grade-II	One	1400-2300
7.	Draughtsmen Grade-III	One	1200-2040
(B) Ministerial Staff :			
8.	Upper Division Clerk	Four	1200-2040
9.	Lower Div. Clerk	Four	950-1500
10.	Daftari	One	775-1025
11.	Barkandaz	One	750-940
Total		Twenty One	

An outlay of Rs. 25.00 lacs has been kept for the 8th Five Year Plan period and Rs. 3.00 lacs for the Annual Plan 1992-93.

V—FLOOD CONTROL & DRAINAGE

Major parts of the Union Territory of Delhi are flood prone. Waters from the Yamuna or Sahibi river can cause flooding and damages. The objective is to protect the Delhi from the menace of floods. Works taken up under this sector comprise of remodelling and lining of Najafgarh drain for a discharge of 10,000 cusecs from Kakraula regulator to its outfall into river Yamuna, construction of the embankments on the left bank of river Yamuna in the entire reach falling in the U.T. of Delhi and embankments on the right bank wherever needed, strengthening of Dhansa Bund, construction of alternative subsidiary drains to cater to the excess flood discharge over the Najafgarh drain. Further a number of feeder drains were also constructed.

Delhi can discharge only 2.5 lacs cusecs in the Yamuna against the requirement of 3.5 lacs cusecs. The devastating fury of the Yamuna floods of 1978 necessitated schemes to strengthen embankments. The work relating to construction of a supplementary drain to N.G. drain will be speeded up and completed by March, 1995. Construction of link drains from village ponds to outfall drains will also be speeded up.

EIGHTH FIVE YEAR PLAN 1992-97 AND ANNUAL PLAN 1992-93

Financial allocations under this sector are summarised below :—

	(Rs. in lacs)
1. Expenditure during 7th Plan	5184.98
2. Expenditure during Annual Plan 1990-91	1063.51
3. Expenditure during Annual Plan 1991-92	919.67
4. Approved Outlay 8th Plan 1992-97	4000.00
5. Approved Outlay Annual Plan 1992-93	1000.00

Brief details of the various schemes included under this sector are as under :—

(A) Embankments

The Central Water Commission has recommended that the Yamuna embankment be strengthened to safely carry a 3.5 lacs cusecs discharge and to cope with 4.5 lacs cusecs when operating with free board. The present embankments can safely carry discharges of upto 2.5 lacs cusecs (assessed). Hence, two schemes for strengthening embankments are included in the 8th Five Year Plan.

1. Improvement of Left Forward Bund—(Rs. 45 lacs)

This scheme provides for widening of L.F. Bund from 5 M to 8 M in the reach RD 2850 M to Delhi UP Border. This scheme has already been cleared by 3rd Technical Advisory Committee and Flood Control Board in its second meeting held on 22-1-91 and by the Flood Control Board in its meeting held on 16-5-91. A provision of Rs. 45.00 lacs has been kept in 8th Five Year Plan 1992-97 and Rs. 10.00 lacs in the Annual Plan 1992-93. No expenditure was incurred in 1991-92.

2. *Strengthening of Right Bank of NG Drain—(Rs. 17.00 lacs)*

The top width of the right bank of NG Drain from RD 145000 to RD 152963, is hardly 3 metres against a requirement of 8 metres. A scheme has therefore been prepared for the strengthening and widening of the right and left banks of NG Drain from Mall Road Bridge to Timarpur Bridge and Nehru Vihar to Tail regulator at a cost of about Rs. 17 lacs which has also been approved by TAC. A sum of Rs. 10 lacs has been provided in the Annual Plan 1991-92 but on exp. has been incurred in 1991-92. The approved outlay for the 8th Five Year Plan 1992-97 is Rs. 17 lacs. Rs. 5 lacs is provided for the Annual Plan 1992-93.

New Scheme

3. *Apron on RME from RD 1400 M to RD 2400 M—(Rs. 25.00 lacs)*

This is an ongoing scheme for which A/A & E/S has been accorded for Rs. 22.96 lacs in the year 1991. The scheme provides for strengthening of existing apron in the reach 1400 M to 2400 M. The strengthening was necessitated by the shifting of the river towards RME in 1989. This reach is a valuable one as the river course is hardly 175M away from RME. This scheme was prepared to prevent erosion of the embankment, the work on the scheme is in progress. A provision of Rs. 25 lacs has been approved for the 8th Five Year Plan 1992-97 and Rs. 2 lacs has been approved for the Annual Plan 1992-93.

New Scheme

4. *Reach U/S of Wazirabad Barrage upto Palla—(Rs. 50.00 lacs)*

As per recommendations of CWC Ministry of Water Resources, all embankments in the UT of Delhi are to be raised and strengthened for a design discharge of 3.50 lacs cusecs and checked for a design flood of 4.50 lacs cusecs. It is therefore, proposed to prepare a scheme in two parts one U/S of Wazirabad and other D/S of Wazirabad. The scheme U/S of Wazirabad upto Palla shall include raising and strengthening of RME from Wazirabad to Palla, Jagatpur Bund and L.F. Bund. A provision of Rs. 50.00 lacs has been made in the 8th Five Year Plan. No funds have been approved for 1992-93. The provision of Rs. 50.00 lacs is meant for land acquisition, survey, investigation and studies. Additional land shall be required for raising & strengthening.

New Scheme

5. *Reach D/S of Wazirabad Barrage upto Jaitpur—(Rs. 50.00 lacs)*

Similarly for the reach D/S of Wazirabad upto Jaitpur, a provision of Rs. 50.00 lacs is approved for the construction of new RME in the portion where it does not exist. Raising and strengthening of existing RME, L.M. Bund & S.M. Bund. A provision of Rs. 50 lacs is kept for land acquisition, survey, investigation, studies and execution of the work. No provision has been made for the Annual Plan 1992-93;

(B) Major Drainage Schemes

The schemes under this head are basically to plan and construct major trunk drains. The schemes are necessitated by the modified run off on account of

urbanisation. Delhi Admn. has decided that all drains which have to carry more than 1000 cusecs discharge have to be planned and executed under the Irrigation & Flood Control Sector. Two major drainage schemes namely, NG Drain and Supplementary Drain are being executed. Rs. 22.80 crores is provided for the 8th Five Year Plan of which Rs. 7.20 crores will be spent during 1992-93.

6. *Increasing capacity of Najafgarh Drain from Dhansa Regulator to Bharat Nagar—(70.00 lacs)*

Agricultural and urban areas in the Union Territory of Delhi were inundated by the waters of the Sahibi in 1977. The banks of N.G. Drain got breached on account of the back-flow in the tributary drains.

A Master Plan for the Sahibi Nadi-Najafgarh Nalla Basin was prepared by the Committee of Direction set up by the Govt. of India to identify causes and suggest remedial measures to avoid recurrence of such floods in future. The Master Plan included a scheme for increasing the capacity of NG Drain for a discharge of 8,000 cusecs in rural areas and 10,000 cusecs in urban area at a cost of Rs. 18.02 crores. This scheme was approved by the Govt. of India, Ministry of Irrigation vide their letter No. F. C12(13)/78 dated 26-5-79. This scheme was subsequently revised to Rs. 37.11 crores for which AA & ES was accorded by Ministry of Irrigation Govt. of India vide their letter No. 12/13/78/FC/Vol. IV dated 30-6-88. The target date for completion of this scheme was 31-3-89. Although most of the work was carried out, inter-state disputes held up. Construction of an additional regulator at Dhansa for discharge coming from upstream has been taken up. An expenditure of Rs. 50.58 lacs has been incurred during 1991-92. An outlay of Rs. 80 lacs is approved for this scheme which includes Rs. 70 lacs for 1992-93. The work on regulator is planned for completion by March 1993.

7. *Rohini Drain Phase-I—(Rs. 2200 lacs)*

This is an ongoing scheme, which was sanctioned by the Govt. of India at an estimated cost of Rs. 35.07 crores in the year 1982 under the name "Supplementary Drain". This scheme envisaged construction of a drain taking off from D/S of the Kakraula Regulator and was aligned along Mungeshpur Drain and Madanpur Drain by reversing their flows upto village Madanpur and thereafter through the lands of village Poothkalan, Ghewara, Madanpur etc. upto Rohini Complex and thereafter through Rohini Complex upto G.T. Road near village Bhilswa and then outfalling into the river Yamuna along by-pass.

The scheme could not be taken up in the upstream of Rohini due to resistance by local leaders.

Hence, a revised alignment was mooted and approved. Permission to execute the scheme was accorded in the year 1987. The new alignment envisaged construction of a drain D/S of Kakraula Regulator along the left side of existing Najafgarh Drain upto outfall of Nangloi Drain and thereafter along Nangloi Drain by reversing its flow upto the intersection with the originally proposed alignment of supplementary drain and thereafter through Rohini Complex upto G.T. Road.

The original scheme was prepared in the year 1980 based on DSR 1977. On account of change as the alignment of the drain and the time gap, the scheme was revised on DSR-1985 with 36% enhancement at a total cost of Rs. 63.79 crore. This was submitted to the Central Water Commission. The Director (Cost Engineering Hydro), CWC advised re-calculation taking into account the actual expenditure upto June, 1990 and framing the balance cost on DSR 1989 with appropriate enhancement to

bring the rates at par with the market rate as on 30-6-90. Accordingly the scheme has been revised at a cost of Rs. 81.29 crores and submitted to the Central Water Commissioner for formal approval.

The revised alignment has already been approved by the Ministry of Irrigation & Water Resources vide their letter dated 25-3-1988. Accordingly the work on changed alignment of the drain has been taken up after obtaining the sanction of Delhi Admn. and the Ministry of Water Resources. The works are in full swing and from April, 1988 to March, 1991 an expenditure of Rs. 34 crores was incurred. The revised scheme provides for excavation of about 1.00 crore cum. of earth, 3.00 lacs sq. km. of lining, 24 Road Bridges, 2 Railway Bridges, 2 Regulators, 2 Acqueduct and 54 inlets. The drain will benefit 251.76 sq. km. of area on completion and will have the storm water discharge of 1250 sq. km of area. The drain with a capacity of 5000 cusecs will mainly be kachha. Lining will be provided where land is not available. It is also proposed to construct pucca cunnette in the bed of the drain for dry weather flow. Works such as execution of drain upto S.S.W.L. (Sub-Soil Water Level) & construction of few bridges have been completed. Remaining works, such as, acqueduct, Retaining wall and bridges are in progress.

Procurement of earth-moving equipments (draglines and dozers) as well as a dredger has been included in the scheme.

The scheme also provides for 2 circles which have already established. The approved outlay for the year 1991-92 is Rs. 796.40 lacs for the entire scheme and the expenditure incurred during the year, 1991-92 is Rs. 568.91 lacs.

An outlay of Rs. 2200 lacs is approved for this project for the 8th Five Year Plan of which Rs. 650 lacs are meant for 1992-93.

It is expected that work on the scheme will be completed by March, 1996.

New scheme

8. Construction of Rohini Drain (Phase II)—(Rs. 100.00 lacs)

The Delhi Development Authority has already developed Rohini Complex and the entire discharge of the catchment is being drained into the Supplementary Drain. It is felt that the Supplementary Drain beyond RD 15,300 to its outfall is inadequate to cater to the additional discharge from Rohini. Its capacity has to raise from 5000 cusecs to 10000 cusecs. This is also in line with the recommendation of the Master Plan where in it was suggested that the land should be reserved for 7,000 to 10,000 cusecs discharge.

To consider this, a scheme costing Rs. 33.20 crores has been framed to increase the capacity of the Supplementary Drain from 5000 to 10,000 cusecs discharge from RD-15300 M to its outfall. The scheme envisages, widening the bed of the drain completed under Phase-I from the present 34.00 M to 54.7 M and providing C.C. lining on its slopes upto G.T. Road, below G. T. Road. A katcha drain has been proposed, as sufficient land is available. Below RD-700 M the drain passes through rocky reaches where it is proposed to provide lining on the side slopes.

All the bridges constructed under Phase-I shall have to be remodelled to allow for the increased capacity of the drain. However, Delhi Ambala Rail Bridge, G.T. Road Bridge and aqueduct under D.T.D. have already been planned and are being constructed to take for 10000 cusecs discharge under Phase-I. The drain below G.T. Road will also be designed to cater to the additional discharge, coming from Narela through Bawana Escape.

A scheme costing Rs. 33.20 crores has already been framed and is likely to be submitted for approval very soon. Works on the scheme are proposed to be taken up in the year 1993-94 and completed by the year 1997-98. A provision of Rs. 100.00 lacs is approved for the 8th Five Year Plan. No funds have been approved for 1992-93.

9. *Varsha Drain Scheme (Supplementary Drain Phase-III)—(Rs. 100.00 lacs)*

Areas West and North West of Rohini are being further urbanised. DDA has taken up development of the Dwarka Project which is expected to generate about 6000 cusecs of discharge. It is therefore, proposed to construct an additional link Drain by reversing the flows of Mungeshpur Drain and Madanpur Drain towards Rohini Complex at an estimated cost of Rs 35.00 crores. This drain is proposed to carry 5000 cusecs. It is proposed to be taken up during the 8th Five Year Plan.

An outlay of Rs. 100.00 lacs is approved for the 8th Plan 1992-97. No outlay has been approved for 1992-93.

10. *Outfall drain for draining Jahangirpuri, Azadpur and Model Town Area—(Rs. 75.00 lacs)*

This is a new scheme which will provide drainage to Model Town, Jahangirpuri, Azadpur etc. These areas do not have drainage facilities. The scheme was conceived in 1976 but not much headway could be made. As per discussion taken by Chief Secretary, Delhi Admn. DDA, MCD and PWD are to prepare damage plans for their respective areas. The Irrigation & Flood Control Deptt. shall construct an outfall drain from the point where the drain gets a discharge of 1000 cusecs or more. An outlay of Rs. 75.00 lacs has been approved for 1992-97 and no outlay has been approved for 1992-93. The project estimates are with Central Water Commission for scrutiny.

11. *Remodelling of Pankha Road Drain—(Rs. 50 lacs)*

Pankha Road Drain was constructed by DDA to cater to the storm water of Janakpuri area. Urbanisation of the adjoining colonies, such as, Viaspuri, Hastal etc. has led to clearance drainage congestion during the monsoon. Delhi Administration decided that this drain be taken over by the I & FC Deptt., and a scheme costing Rs. 154.00 lacs was prepared of 1000 cusecs.

Following the development of the Dwarka Project there is a proposal to divert the Palam Drain near RD-7000 and connect it to the Pankha Road Drain. This proposal will further increase the discharge in the Pankha Road Drain to 1800 cusecs. To remodel the Pankha Road Drain in consultation with the D.D.A. a provision of Rs. 50.00 lacs has been made in the 8th Five Year Plan 1992-97. No outlay has been approved for 1992-93.

12. *Lining of Najafgarh Drain between Ring Road Bridge and Bharat Nagar Bridge—*
(Rs. 75.00 lacs)

The capacity of Najafgarh Drain has been increased to 10000 cusecs in the reaches upstream of Bharat Nagar Bridge under the scheme "Increasing capacity of NG Drain from Dhansa Bund to Bharat Nagar Drain Bridge". The reaches down stream of Ring Road Bridge (Basai Darapur Bridge) have katcha side slopes, except in isolated pockets. These katcha side slopes need to be lined to improve the appearance and functioning of drain.

During the 8th Five Year Plan, an amount of Rs. 75 lacs is earmarked. No outlay has been approved for 1992-93.

(C) **Small Drainage Schemes**

13. *Re-modelling/Improvement of existing Drains—*(Rs. 250.00 lacs)

(New Scheme)

Earlier the dry weather flows from the villages used to be contained in a village pond which used to spill only during monsoons for which rural drains had been planned by Irrigation & Flood Control Deptt. Now the quantum of dry weather flows have increased on account of drinking Water Supply by MCD and open katcha drains are no longer capable of carrying the sullage water. The health authorities are also insisting on the improvement of the drainage system in village abadies. Accordingly, it is proposed to construct drains which will prove more effective. The following works are included under the scheme :—

- (i) Construction of pucca drain in place of katcha drains.
- (ii) Remodelling of Mungeshpur drain from RD-52500 to 120900.
- (iii) Construction of connettex in Trunk Drain No. I.
- (iv) Construction of cunnettee in Trunk Drain No. I.
- (v) Providing pitching on side slope in curved portion of Ghazipur drain and Shahdara outfall drain.
- (vi) Re-sectioning and formation of banks of Gazipur Drain, Shahdara Link Drain and Shahdara outfall drain.
- (vii) Remodelling of Narela Link Drain-II Bawana Escape from RD 7560 M to 19790 M.
- (viii) Remodelling of Bankner Link Drain & Drain No. 6 upto its outfall into new drain, (Bankner).
- (ix) Remodelling of New drain for 5000 cusecs discharge upto its outfall into Supplementary Drain.
- (x) Drainage Scheme for the area North of R/B of Bawana Escape between RME & G.T. Road.
- (xi) Improvement of Burari Creek.

The scheme has been kept open ended so that fresh problems arising at any time during the 8th Plan period may be covered. An outlay of Rs. 250 lacs is approved for this scheme for the 8th Plan which includes Rs. 23 lacs for 1992-93.

14. Other small drainage improvement schemes—(Rs. 100 lacs)

It is proposed to improve the existing small rural drains which are slowly changing their character. Village ponds, can no longer contain the discharges. They need to be improved so as to carry sullage water. An outlay of Rs. 100 lacs is approved for the 8th Five Year Plan which includes Rs. 30 lacs for 1992-93.

This Scheme comprises the following works :—

- (i) Drainage of Burari Area
- (ii) Drainage for village Jagatpur & Wazirabad
- (iii) Drainage-cum-Flood Protection for Tajpur & Molar Bund
- (iv) Mundka Drainage

New works

- (v) Construction of seven culverts on Beharipur Drain from RDO to RD 925 M.

The scheme has been kept open ended so that emergent problems are covered under this programme.

(d) Bridges :

15. Access Road and Bridges along Embankments of Major/Trunk Drains—(Rs. 100 lacs)

A large number of unauthorised colonies are cropping up all over Delhi and the embankments/banks on major drains are being used by the residents of the colony as a thoroughfare/passage. The Administration is under pressure to provide proper access roads on such lands. Bridges across the trunk drains are also required.

The following works are covered under the scheme for which an outlay of Rs. 100 lacs is approved in the 8th Plan and Rs. 40 lacs in the Annual Plan 1992-93.

- (i) Construction of 4.25 M wide single lane bridge at RD 9250 M Trunk Drain No. I.
- (ii) Construction of two lane bridge at RD 9750 M of T.D. No. I.
- (iii) Construction of foot bridge at Tri Nagar across NG drain at RD-128000.
- (iv) Providing Bajri path on L/B of NG Drain from RD 23500 to RD-65000.

New Works

- (v) Construction of road on Escape drain No. I.
- (vi) Construction of road on both banks of Karawal Nagar drains.

- (vii) Construction of road on L/B of T.D. No. 1 from G.T. Road to Artinial Highway.
- (viii) Construction of road on R/B of T.D. No. I between [UP Border and Artinial Highway.
- (ix) Construction of 2 lane bridge across Karawal Nagar drain at RD 740 M.
- (x) Construction of service road on L/B of New Drain.
- (xi) Construction of bridges at RD 7000 & 7600 M of Palam Drain.
- (xii) Improvement of top surface of RME (RD-15185 to 18350) & R/B of Bawana Escape (RD-19553 to 24160)

(E) Bank Protection Schemes

This programme is meant to ensure that the existing bank is not damaged by the existing active course of the river. Remedial measures include construction of shanks and providing stone aprons.

16. Stone apron on L.F. Bund R.D. 220 M to R.D. 4500 M—(Rs. 128 lacs)

The Scheme was cleared in 3rd TAC meeting held on 22-1-91 and has also been cleared by the Standing Finance Committee in its meeting held on 26-8-91. This scheme provides for an 11 M wide and 1.2 M deep apron on the river side slope of LF Bund between RD 220 M, RD 4500 M. The apron from RD 0 M to RD 220 M and RD 220 M and RD 4500 M to Delhi UP Border has already been laid. A provision of Rs. 128.00 lacs has been kept in the 8th Five Year Plan 1992-97 and Rs. 20.00 lacs for the Annual Plan 1992-93. The Scheme is expected be completed by June 1993.

17. 2 shanks at RD 1950 M and RD-2375 M of LF Bund—(Rs. 65 lacs)

The scheme provides for construction of 2 earthen shanks with stone pitching and an apron to keep the river away from the embankment.

An expenditure of Rs. 20.87 lacs was incurred during 1991-92. It is proposed to complete this scheme in the 8th Five Year Plan 1992-97 for which a provision of Rs. 65.00 lacs has been kept, Rs. 10.00 lacs is approved for the Annual Plan 1992-93.

(F) Anti-Erosion Schemes

18. Anti-Erosion and River Training works on the Yamuna—(Rs. 75.00 lacs)

The course of the river in the UT of Delhi is on an Alluvial bed. The river has a tendency to swing between the embankments. It is therefore, necessary to tie the river at a pre-determined locations so that the river does not swing and attack any of the embankments. Since the embankments are earthen and shanks have not been permitted by the Central Water Commission on account of Inter State problems, anti-erosion works such as construction of studs, bed-bar and apron etc. will have to be undertaken.

Rs. 79.43 lacs was spent on anti-erosion measures in 1991-92. For the 8th Five Year Plan 1992-97, Rs. 75 lacs is earmarked and no funds have been approved for 1992-93. This scheme comprises the following works :—

- (i) Anti-erosion works on left bank of UP Border to old Rly. Bridge.
- (ii) Constn. of 5 nos. new spurs on right bank between Wazirabad Barrage to Nizamuddin Bridge.
- (iii) Anti-erosion works D/S of Okhla to Delhi Haryana Border.
- (iv) Anti-erosion works on right bank of river Yamuna U/S of Wazirabad Border to village Palla.
- (v) Formation of pilot cut between old Rly. Bridge & ITO bridge to shift the river course towards the right side.

19. Protection of Govt. Land—(145 lacs)

Land has been acquired by I & FC Department all over Delhi. The growth of unauthorised settlements and Jhuggi clusters have threatened the land. It has become essential to protect land belonging to I & FC Deptt. by suitable methods. These include construction of boundary walls and fencing. Rs. 145 lacs is provided in the 8th Five Year Plan. Of which Rs. 1.00 crores is expected to be utilised during the year 1992-93. The same amount of Rs. 320 lacs was recommended by working group for 1992-97. The Approved outlay for 1992-93 is Rs. 50.00 lacs. Rs. 17.10 lacs was spent during 1991-92.

This scheme comprises the following works :—

- (i) Protection of land on left forward bnud from RD. OM to 5740 M.
- (ii) Construction of wall cum fencing on R/B of NG Drain from RD 138670 to 143000.
- (iii) Construction of brick masonry wall on left bank of NG Drain from B.B.M. Depot to Najafgarh Nalah pump house.
- (iv) Construction of brick masonry wall on both sides of NG Drain from Bharat Nagar Bridge to Delhi Ambala Rly. Line (RD-134250 to 136400).
- (v) Construction of brick masonry wall on left bank of NG Drain from RD. 118250 to 125275 M.
- (vi) Construction of brick masonry wall on left bank of NG Drain from RD. 129100 to 133300.
- (vii) Protection of Govt. land by construction of boundary wall along R/B of NG Drain from RD 100900 to 113964.
- (viii) Protection of Govt. land from Dhansa to Dhulsiras bridge.
- (ix) Protection of Govt. land along R/B of NG Drain from RD 29000 to RD 65000.

New Works

- (x) Protection of Govt. land—construction of boundary wall along left bank of NG Drain from outer Ring Road RD-100000 to Punjabi Bagh RD-118250’).
- (xi) Construction of boundary wall along NG Drain from Kakraula regulator (65000’) to outer Ring Road (100000’).
- (xii) Protection of Govt. Land on L/B of NG Drain in village Kanganheri near RD 17000.
- (xiii) Protection of Govt. land at Mungeshpur drain, Nangloi drain, Palam drain, Bawana drain, Katewara drain, Bajidpur drain, Sultanpur drain, Madanpur drain and B.C. drain.
- (xiv) Construction of boundary wall on R/B of NG drain, Punjabi Bagh to Swatantra Bharat Mills (RD-118250 to 127256’).
- (xv) Protection of Govt. land on both sides of Gazipur drain from RD. 3600 to 5690 M.
- (xvi) Protection of Govt. land on L/B of Shahdara drain from RD 3500 to 4500.
- (xvii) Protection of Govt. land on Shahdara outfall drain from RD 1000 to 5800.
- (xviii) Protection of Govt. land on Rawana Escape,
- (xix) Protection of Govt. land on Alipur link drain, Ghoga link drain, Narela link drain and Sanoth link drain.
- (xx) Protection of Govt. land on Khera Khurd link drain, Khera Kalan link drain and Naya Bans link drain.
- (xxi) Protection of Govt. land on RME.
- (xxii) Protection of Govt. land on Burari Creek drain from RD 0 to 2430 M.

20. *Liability of Completed Schemes—(Rs. 65.00 lacs)*

A Budget Head for meeting liabilities of completed schemes has been permitted in order to ensure that schemes/projects completed in the years are not reflected in the Plan Document, only to cater for spill-over liabilities. Rs. 65 lacs is approved for the 8th Plan which includes Rs. 20 lacs for 1992-93.

21. *Charged Expenditure—(Rs. 100 lacs)*

Expenditure attributable to the directives of courts of law will be met under this head. A provision of Rs. 100 lacs has been kept for the 8th Five Year Plan of which, Rs. 30 lacs is provided in the Annual Plan 1992-93.

(G) Water Development Schemes**22. Survey and Hydraulic Data Collection—(Rs. 30.00 lacs)**

It has become essential to prepare project estimates more meticulously bringing out the facts on the ground. The course of the river Yamuna has to be plotted every year to plan schemes relating to anti-erosion works. Accordingly Rs. 30 lacs has been provided for Survey & Hydraulic data collection during the 8th Five Year Plan 1992-97 out of which the outlay for 1992-93 is Rs. 18.00 lacs, Rs. 16.38 lacs was spent during 1991-92.

23. Quality Control and Material Testing Laboratory—(Rs. 20 lacs)

Control of quality of different materials used in the construction of various projects is absolutely essential. Quality control also reduces construction costs by 5% to 10%. A scheme costing Rs. 21.49 lacs for installation and procurement of laboratory equipment was drawn up in 1984. Work on setting up the laboratory was started in 1989-90. The building for the laboratory has been constructed and the equipment has been installed. The laboratory shall become operational shortly after obtaining an electric connection for the required load.

The actual expenditure during the year 1991-92 was Rs. 1.34 lacs. The approved outlay for 1992-93 is Rs. 2.00 lacs and Rs. 20.00 lacs is approved for the 8th Five Year Plan 1992-97.

24. Direction & Administration—(Rs. 55.00 lacs)

The Irrigation & Flood Control Department was created on 30-12-64 to look after flood control works in Delhi. The Irrigation & Flood Control Department is responsible for the construction/remodelling and lining and maintenance of Flood Control Projects, drains, embankment, bunds, link bunds, bridges, link roads, various ponds, small drainage schemes, anti-erosion works on river Yamuna etc. The Administration & Tech. Control of minor and Medium irrigation works and preparation & implementation of the Master Plan for Irrigation are also entrusted to the Department. The existing Divisions of the Department are as under :—

1. Office of the Chief Engineer (I & F) & Divisions.
2. Office of the Superintending Engineer (F) & Divisions.
3. Supplementary Drainage Circle-I & its divisions.
4. Supplementary Drainage Circle-II and its divisions.

(A) Strengthening of Chief Engineer's Office

The Chief Engineer's office is finding it difficult to monitor the various tasks assigned to it such as scrutinising tenders award, of works etc. The design cell is unable to cope with the work load. It is therefore, proposed to create an office headed by a S.E. with three Executive Engineers and the following staff :—

		Rs.
1. Superintending Engineer	One	3700-5000
2. Executive Engineer	Three	3000-4500

3. Assistant Engineer	Six	2000-3500
4. Junior Engineer	Twelve	1400-2300
5. Steno	One	1200-2040
6. LDC/Typist	Four	950-1500
7. Peon	One	750-0940

(B) Mechanical Circle

There are three Mechanical Divisions in the Irrigation & Flood Central Wing. These divisions are responsible for earth work below subsoil water level and desilting drains with the help of dreglines, dredger and Bull Dozers, pumping of effluent water of Coronation Treatment Plant and pumping of stagnant flood water. The Mechanical Division overseas. Supply of cement and steel to various projects, as well as supply of POL etc.

The I & FC Department has machinery worth Rs. 1124.50 lacs which justifies more or less four to five mechanical divisions alongwith a Circle Office as per the recommendations of the 10th meeting of the Standing Finance Committee of Senior Mechanical Engineers of CWC held at Pune from 9-5-83 to 13-5-85. It is, therefore, proposed to set up Mechanical Circle in the I & FC wing. All the divisions will be working under the Administrative Control of a SE (Mech.). This post will have to be created. The Mechanical Circle has the following advantages :—

- (i) By strengthening the Mechanical wing, it would be possible to steadily improve the utilisation of equipment from the present level of 40% to 70% and to take up additional works.
- (ii) Savings will be possible through inventory control of spare parts.
- (iii) Disposal unserviceable equipment and spare parts will be expedited.
- (iv) Implementation of schemes and projects will be accelerated.

The following posts are proposed to be created under this Circle:

Technical Staff

		Rs.
1. Superintending Engineer	One	3700-5000
2. Surveyor of works	One	3000-4500
3. Engineer Assistant	One	2000-3500
4. Assistant Surveyor of Works	Two	2000-3500
5. Junior Engineer	Four	1400-2300
6. Draftsman	One	1200-2040

Ministerial Staff

1. Office Superintendent	One	1640-2900
2. Stenographer	One	1200-2040
3. Upper Division Clerk	Four	1200-2040
4. L. D. C.	Four	950-1500
5. Peon	Two	750-0940

(C) Strengthening of Finance and Accounts Branch :

The staffing of the Finance and Accounts Branch has not kept pace with the increase in work.

The following posts are proposed over and above the existing staff :—

		Rs.
1. Research Officer (Statistical)	One	1640-2900
2. Statistical Assistant	One	1400-2300
3. U.D.C.	Three	1200-2040
4. L. D. C./Typist	Three	0950-1500
5. Peon	One	0750-0940

(D) Planning & Statistical Cell :

The Irrigation and Flood Control Department consists of nearly 20 divisions and four circles. The collection, compilation and analysis of plan & non-plan schemes is a massive and voluminous task.

The following posts for the planning and statistical cell under plan revenue Major Head '2711' Plan (Water Development Scheme) are needed :—

		Rs.
1. Assistant Director	One	2200-4000
2. Research Officer	Two	1640-2900
3. Stastical Asstt.	Four	1400-2300
3. Investigator	Four	1200-2040
5. Steno	One	1200-2040
6. Peon	Two	0750-0940

(E) Co-ordination Cell :

The Irrigation & Flood Contral Department Works CPWD pattern. A large number of work charged as well as Casual Workers (Muster Roll staff) are employed. It is proposed to establish a Co-ordination Cell for such staff on the C.P.W.D. pattern. This is expected to mitigate the ad-hocism in dealing with the service matters of such staff. The following posts are proposed to be created :—

		Rs.
1. Assistant Engineer (Civil)	One	2000-3500
2. Office Superintendent	One	1600-2660
3. Assistant	Four	1400-2300
4. U.D.C.	Eight	1200-2040
5. L.D.C.	Eight	0950-1500
6. Daftry	One	0775-1025
7. Peon	One	0750-0940

The approved outlay for the 8th Five Year Plan and the Annual Plan 1992-93 are Rs. 55.00 lacs and Rs. 10.00 lacs, respectively, under the head directions and administration.

VI—E N E R G Y

The Energy sector received the highest priority in the 8th Five Year Plan as the Energy requirement of this Mega City will rise further to keep pace with its development as well as the increase in its population.

2. Delhi Electric Supply Undertaking, a statutory body of MCD, is entrusted with the responsibility of generation, transmission and distribution of electricity in the National Capital Territory of Delhi which also includes bulk supplies of power to NDMC and MES for distribution in their respective areas. DESU is proposed to be reorganised as an independent State Electricity Board in the proposed new set up of the National Capital Territory.

3. The development of land in Delhi is governed by the Master Plan prepared by Delhi Development Authority. In addition to DDA, other agencies like CPWD, MCD, NDMC and Delhi Admn. also take up the development of land for residential, commercial and industrial purposes. DESU's development activities are linked with the programmes and policies of such local bodies and arrangements have to be made to meet the power requirements of such developments and the natural growth of the National Capital Territory of Delhi.

4. Delhi Development Authority, the main agency for development of land in Delhi, is accelerating construction activities and its development programmes include development of land south of Hindon cut, Papan kalan, Madanpur Khadar (Sarita Vihar), North of Wazirabad Road, Mehrauli, Kingsway Camp, Rohini and Narela etc. The land being developed at these places will comprise residential areas, commercial complexes and institutional areas.

Power demand and availability of power :

The maximum demand of power in Delhi touched 1537 MW in January, 1992. As per projections made by the 14th Power Survey Committee of the Central Electricity Authority the maximum demand of Delhi will reach 2532 MW by the end of the 8th Five Year Plan.

2. The power requirements of Delhi are mainly being met by DESU from I. P. Station, 6x30 MW Gas Turbine and 2x67.5 MW at RPH, BTPS, Barasuil Hydro Electric Project of NHPC, Singrauli Super Thermal Power Project of NTPC. DESU also gets power from ANTA and AURIYA Gas Turbines of NTPC. The shortfall, if any, is met by DESU through assistance from the northern regional grid.

3. The following steps are being taken by DESU to bridge the gap between the demand and the availability of power :—

- (i) 3 × 34.07 MW Waste Heat Recovery Units are to be installed at the existing gas turbine station in the combined cycle mode.
- (ii) A 400 KV ring is being established around Delhi which will bring bulk power to Delhi from the NCR power project being commissioned at Dadri, UP.

- (iii) It is proposed to install a 615 MW Gas Turbine Project near Bawana at the 400 KV sub-station site. The project feasibility report for this work has been prepared by Central Electricity Authority who are acting as consultants to DESU. Possibilities are being explored to take up the project in private sector also.

4. Year-wise maximum demand as assessed by 14th Power Survey Committee and availability of power from different sources so far identified is given below :—

	1990-91 Actual	1991-92 Actual	1992-93 Projected	1993-94 Projected
Max. demand (as assessed by 14th Power Survey Committee)	1437	1537	1800	1966
Availability of Power				
1. DESU's existing plants at IP Stn./Rajghat	200	200	200	200
2. 6x30 MW Gas Turbine	150	150	150	150
3. 2x67.5 MW replacement units	135	135	135	135
4. B.T.P.S.	500	500	500	500
5. Barasuil	20	20	20	20
6. Singrauli	150	150	150	150
7. Salal	45	45	45	45
8. Anta Gas Turbines	45	45	45	45
9. Auriya Gas Turbines	65	65	65	65
10. 4x210 MW Thermal sets at Dadri	—	—	—	710
Total availability	1310	1310	1310	2020
Gross deficit	—127	—227	—490	+54
New Generation Project (Proposed)				
(1) 3x34.07 MW waste heat recovery units	—	—	—	68
(2) 615 MW Gas Turbine Station at Bawana	—	—	—	—
Net deficit (—) Surplus (+)	—127	—227	—490	+122

	1994-95	1995-96	1996-97
Maximum Demand	2145	2334	2532
<i>Availability of power</i>			
(1)	200	200	200
(2)	150	150	150
(3)	135	135	135
(4)	500	500	500
(5)	20	20	20
(6)	150	150	150
(7)	45	45	45
(8)	45	45	45
(9)	65	65	65
(10)	710	710	710
Total availability :	2020	2020	2020
Gross deficit :	-125	-314	-512
New Generation Project (Proposed)			
(1)	102	102	102
(2)	615	615	615
Net def. (—) surplus (+)	+592	+403	+205

Approach to the Eighth Five Year Plan

The present sources of power located in Delhi are not adequate to meet the full requirements with the result that DESU has to depend on sources outside Delhi to meet its power requirements. Drawal of power from the northern grid results in low voltage. At times, DESU is forced to resort to load shedding to maintain the voltage and frequency parameters at acceptable levels.

2. In order to augment core generation, DESU had initiated proposals for establishment of gas turbines in Delhi. Consequent on this, Central Electricity Authority has now framed a project feasibility report for installation of a 615 MW gas turbine station. These gas turbines are proposed to be located at Bawana. Setting up of this project alongwith the 400 KV ring will improve the power supply position in Delhi considerably during the 8th Five Year Plan.

3. Emphasis has been laid in the 8th Five Year Plan on strengthening of transmission and distribution systems on all voltage levels including 11KV and LV and installation of shunt capacitors. It is also proposed to evolve new designs for the 11KV distribution system which essentially will improve aesthetics. Segregation of non-essential load from the essential categories is also proposed to reduce the quantum of load shedding.

4. Keeping in view the power requirement assessed by the 14th Power Survey Committee for the National Capital Territory of Delhi and development programmes being stipulated under various heads of developments during 8th Five Year Plan, an outlay of Rs. 1220 crores is approved for 1992-97 for Energy Sector. The agency-wise position is as under :—

(Rs. in crores)

Name of Agency	Seventh Plan Expdr.	Expdr. 1990-91	1991-92		Approved Outlay	
			Apprd. outlay	Expdr.	8th Plan 1992-97	A. Plan 1992-93
1. DESU	854.34	181.57	260.45	215.44	1172.00	265.00
2. NDMC	33.54	8.20	8.00	6.75	40.00	8.00
3. DEDA	5.37	1.20	1.55	1.55	.00	2.00
Total	893.25	190.97	270.00	223.74	1220.00	275.00

No outlay has been provided in the eighth five year plan for the Bawana Gas Turbine Project by the Planning Commission as the project is yet to be finally approved by Government of India. Further, implementation of this project in the Private Sector is also being explored.

The scheme-wise details are as under :

1. Renovation and Modification Works (Rs. 1340 lacs)

I. P. Thermal Power Station requires renovation and modification to enable it to continue generating electricity. The following renovation and modification works will be taken up during the eighth five year plan 1992-97 :—

- (A) Installation of new 90T Tippler
- (B) Renovation of ABL Boilers at Unit No. 2, 3 & 4
- (C) Modification of Burners, replacement of Feed valve at Unit No. 5
- (D) Repair of 62.5 MW Generator Rotor, Unit No. 4
- (E) Replacement of 3.3 K.V. Switchgear at Unit No. 2,3 & 4
- (F) Replacement of AVR
- (G) Augmentation of Furnace oil/HPS handling system
- (H) Provision of Fire detection/protection system
- (I) Replacement of ESP at Unit No. 5
- (J) Pneumatic Conveying System for dry fly ash disposal
- (K) Reorientation of ash ponds
- (L) Inter connection for feeding crushed coal to 15 MW Unit
- (M) Provision of Gas firing 15 MW Boiler at RPH.

An outlay of Rs. 1340 lakhs has been provided for these works during the Eighth Five Year Plan which includes Rs. 400 lakhs for Annual Plan 1992-93.

2. *2 × 67.5 MW Replacement Unit at RPH—(Rs. 1807 lacs)*

The work on this scheme has been completed and both the Units stand commissioned. A provision of Rs. 1807 lacs has been approved for the Five Year Plan. This will meet the outstanding payments to BHEL and will pay for the completion of spill-over works beyond March, 92. Approved outlay for the Annual Plan 1992-93 is Rs. 1000 lacs.

3. *3 × 34.07 MW Waste Heat Recovery Units—(Rs. 21000 lacs)*

This scheme was sanctioned at an estimated cost of Rs. 211.97 crores which includes IDC of Rs. 21.65 crores. A letter of intent was placed on M/s BHEL on 1-8-90 but the advance could not be released in view of the fact that the final clearance from the Govt. of India was received only in April, 91. In the meantime, M/s BHEL demanded an escalation in the prices and a Committee was therefore appointed by the Govt. of India with representatives from CEA, BHEL and DESU. Based on the recommendation of this Committee, negotiations were held between CMD, BHEL and GM DESU and a contract has been finalised at Rs. 216 crores. However, taking into consideration the cost of non-BHEL items and IDC component, the latest estimated cost of the project works out to Rs. 253 crores approx.

An outlay of Rs. 21000 lacs has been approved for this scheme for the Eighth Five Year Plan 1992-97. The approved outlay for the Annual Plan 1992-93 is Rs. 7500 lacs. The commissioning schedule of the three units is as under :

Unit No. I :—18 months from the Zero date of project i.e. April '92 and subsequent units at an interval of four months each.

4. *615 MW Gas Turbine at Bawana*

This scheme was techno-economically cleared by CEA in Aug. '90 at an estimated cost of Rs. 925.48 crores for variable load mode operation. In the meantime the Govt. of India have taken a decision to set up all the gas based projects for base load operation.

An allocation of 2 MCMD gas was made available to DESU which is not sufficient for 600/900 MW capacity on base load operation. Efforts to get additional allocation of one MCMD gas could not be successful and accordingly CEA, who are acting as consultants for this project, have revised the cost estimates which works out to Rs. 1375 crores including IDC for a 615 MW station. The cost estimates have been sent to CEA for techno-economic clearance.

No allocation has been approved by the Planning Commission for this project as is yet to be finally approved by Govt. of India.

In the meantime, DESU is also exploring the possibility of inviting private participation for this project. In all sixteen proposals have been received and these have been sent to CEA for evaluation. In the absence of any allocation of funds for this project at this stage, commissioning schedule can not be estimated. In case it is implemented in the private sector, no plan funds will be required but if it is implemented under plan, funds will be required from the Annual Plan 1993-94 onwards.

TRANSMISSION AND DISTRIBUTION SCHEMES

(i) 400 KV scheme—(Rs. 17600 lacs)

A 400 KV ring is being established around Delhi in order to draw power from the northern regional grid of which DESU is a constituent partner. The project feasibility report of the 400 KV ring around Delhi was cleared techno-economically by CEA for execution during 7th Five Year Plan at an estimated cost of Rs. 113.92 crores. This project was to be financed partly by a World Bank loan amounting to US 60 million dollars. The World Bank loan, however, was suspended in Jan., 89 due to non-compliance of the covenants of the loan agreement relating to the implementation of satisfactory financial recovery plan. DESU could not achieve the financial viability without steep increase in the tariff. The proposal of DESU for the increase in the tariff was not approved by the competent authority with the result that the World Bank loan was finally cancelled in Aug., 90.

The estimated cost of the project is Rs. 193.04 crores which includes IDC of Rs. 24.13 crores. The project was approved by PIB in Jan. 91 and the CCEA clearance was obtained in May, 91. Work on this project has already started. 400 KV Sub-stations will be constructed at Mandaula, Bawana and Bamnauli to link the 400 KV Ring from Dadri to Ballabhgarh.

The approved outlay for this project during the 8th Five Year Plan 1992-97 is Rs. 17600 lacs and approved outlay for the Annual Plan 1992-93 is Rs. 5000 lacs. The target is to add 4x315 MVA (400/220 KV) of transformation capacity and 222 ckt. kms. of 400 KV transmission line during 8th Five Year Plan period. Mandaula sub-station has already been completed and the project is proposed to be completed by June, 1994.

(ii) 220 KV scheme—(Rs. 21000 lacs)

This is a continuing scheme which envisages establishment of 220 KV sub-stations and lines as well as augmentation of transformation capacity on the existing 220 KV sub-stations in order to meet the growing power demand of Delhi.

A project report for 220 KV works to be covered during the 7th Five Year Plan 1985-90 was cleared techno-economically by CEA at an estimated cost of Rs. 214.88 crores. The work on the sub-stations/lines covered during the 7th Five Year Plan is still in progress. In addition to these, new works to be carried out during the 8th Five Year Plan have been identified and the same have been included in the 8th Five Year Plan. New sub-stations will be constructed at Naraina, Karawal Nagar, Dhaula Kuan, Sirifort, Dwarka, Subzi Mandi, Park Street etc.

An outlay of Rs. 21000 lacs has been approved for this scheme during the 8th Five Year Plan and approved outlay for the Annual Plan 1992-93 is Rs. 3200 lacs. The target is to add 2800 MVA of transformation capacity and 355 ckt. kms. of 220 KV transmission lines during the 8th Five Year Plan.

(iii) 66 KV scheme—(Rs. 6500 lacs)

66 KV voltage has been established as sub-transmission voltage in the areas outside the inner ring road in Delhi. In addition to this 33KV voltage also continues to remain as sub-transmission voltage in the areas inside the inner ring road. A number of 66/33KV sub-stations are also being established to act as an infeed point to the existing 33KV system.

Based on the recommendations of M/s Swedpower, the sub-stations/lines to be constructed during the 8th Five Year Plan have been identified and the works shall be taken up on year to year basis depending upon the system requirements. New sub-stations will be constructed at Dallupura, Mangolpuri, Pitampura, Dwarka, Karawal Nagar, Okhla, School Lane, Vidyut Bhawan, etc.

An outlay of Rs. 6500 lacs has been approved for this scheme during the 8th Five Year Plan 1992-97 and approved outlay for the year 1992-93 is Rs. 1200 lacs. The target is to add 1455 MVA transformation capacity and 117 ckt. kms. of 66KV transmission lines during the 8th Five Year Plan 1992-97.

(iv) *33 KV scheme—(Rs. 6500 lacs)*

33 KV is the sub-transmission voltage in the National Capital Territory of Delhi inside the areas bounded by inner ring road. This is a continuing scheme which envisages establishment of new 33/11 KV sub-stations together with the associated 33 KV transmission lines and also augmentation of transformation capacity on the existing sub-stations to meet the growing power demands. The works proposed to be taken up during the 8th Five Year Plan under this scheme have already been identified, based on the recommendations of M/s Swedpower. The work shall be taken up on year to year basis depending upon the system requirements. New sub-stations will be constructed at Green Park, Ajmal Khan Road, Pusa Road, Dev Nagar, Shastri Park, Sarswati Vihar, etc.

An outlay of Rs. 6500 lacs has been approved for this scheme during the 8th Five Year Plan and the approved outlay for the Annual Plan 1992-93 is Rs. 800 lacs. The target is to add 1002 MVA of transformation capacity and 232 ckt. kms. of 33 KV transmission lines during the Eighth Five Year Plan 1992-97.

(v) *11 KV and LV works—(Rs. 35003 lacs)*

11 KV is the distribution voltage in the National Capital Territory of Delhi and the ultimate demand of the consumers is met by 11 KV system. The strengthening/augmentation of 11 KV and LV network is a continuing process to meet the growing demand of the existing areas as well as for electrification of new Housing, Commercial, Institutional Complexes that are being developed by DDA, MCD, Cooperative Group Housing Societies and other developing agencies.

An outlay of Rs. 35003 lacs has been approved for the Eighth Five Year Plan 1992-97 for this scheme and approved outlay for the Annual Plan 1992-93 is Rs. 6500 lacs. The target is to add 1300 MVA transformation capacity and 5500 ckt. kms. of 11 KV and LV transmission and distribution line during 1992-97. It is also proposed to sanction four lacs new consumer connections during the 8th Five Year Plan.

(vi) *SLDC/SCADA system—(Rs. 3500 lacs)*

The power system of DESU at present is controlled manually through system operation control room with the help of telephone lines, VHP sets, wireless sets and PLCC links etc. The complexity of the power system and the quantum of information to be handled by the control room engineers has reached a point where human capacity is inadequate for proper handling of emergency situations. In order to have a proper control on the system, a unified scheme for setting up of a computerised load despatch centre in the northern region was conceived by NREB during the year 1988-89.

The project report for the unified scheme was cleared techno-economically by CEA in May, 89 and pre-PIB meeting was held in March, 90. The scheme was put up to PIB in Jan. 91 but was not cleared in the absence of a viable plan for recovery of the investments that will be made. DESU has also taken up the matter in various meetings held in NREB. A memorandum of understanding was also signed by DESU with NREB on the condition that DESU shall be free to opt out of the unified scheme if it can implement its SCADA system earlier than unified scheme of NREB.

In the meantime DESU has gone ahead with the SCADA system of its own and the project feasibility report of DESU's SCADA system at an estimated cost of Rs. 94.29 crores was considered for techno-economic clearance in the meeting dated 12th May, 92 of CEA and the same has been cleared.

An outlay of Rs. 3500 lacs has been approved for this scheme for the Eighth Five Year Plan 1992-97 and approved outlay for Annual Plan 1992-93 is Rs. 100 lacs.

(vii) *Installation of shunt capacitors—(Rs. 1450 lacs)*

The installation of shunt capacitors is a continuous process in order to improve voltage profile in the system. DESU is paying special attention to this area of work and capacitors are being installed on the basis of studies carried out by NREB from time to time for this purpose.

The installed capacity of shunt capacitors in DESU system as on March, 1992 is 1015 MVAR and another 20 MVAR capacitors are available in stock at site which shall be commissioned shortly. Another case for purchase of 90 MVAR capacitors (18 banks of 5 MVAR each) is under process. Thus a total capacity of installed capacitors at the end of 1992-93 shall be 1125 MVAR.

An outlay of Rs. 1450 lacs has been approved for the installation of shunt capacitors during the Eighth Five Year Plan 1992-97. The quantum of capacitors to be installed shall depend upon the studies to be carried out by NREB from time to time.

GENERAL SCHEMES

(i) *System improvement in rural areas and tube-well connections—(Rs. 500 lacs)*

All the villages in the Union Territory of Delhi have been electrified. However, some system improvements/augmentation works are carried out in order to meet the growing power requirements of the tube-well connections in the rural areas.

An outlay of Rs. 500 lacs has been approved for the Eighth Five Year Plan 1992-97. The approved outlay for the Annual Plan 1992-93 is Rs. 100.0 lacs. The target is to add 3000 tube-well connections during the Five Year Plan 1992-97.

(ii) *Electrification of Harijan Basties—(Rs. 25 lacs)*

The work of electrification of Harijan Basties in rural areas has been completed by DESU. However, in order to improve the living standard of the people belonging to the weaker sections of the society the work of electrification of Harijan Basties/Pockets is being carried out by DESU on the advice of Social Welfare Deptt. of Delhi Admn.

An outlay of Rs. 25 lacs has been approved for the Eighth Five Year Plan 1992-97 and the approved outlay for the Annual Plan is Rs. 5 lacs.

Housing for DESU staff—(Rs. 375 lacs)

At present there are about 26,000 employees in DESU and houses are not available for the essential operations and maintenance staff. It is felt necessary to have staff quarters for DESU staff spread all-over Delhi. Accordingly, DESU is constructing staff quarters in areas like Mandawali (Patparganj), Rohini, Vasant Kunj and Sarita Vihar. DESU is also constructing residential flats at some of the existing 11KV sub-stations.

An outlay of Rs. 375 lacs has been approved for this scheme for the Eighth Five Year Plan 1992-97. The approved outlay for the Annual Plan 1992-93 is Rs. 170.00 lacs.

Administrative & other buildings—(Rs. 375 lacs)

There is shortage of office accommodation and as such more office buildings are required to be constructed for efficient maintenance of the transmission and distribution system. DESU has plans to construct office buildings, headquarter office, zonal-cum-complaint centre, centralised transport workshop and training institute etc.

An outlay of Rs. 375 lacs has been approved for the Eighth Five Year Plan 1992-97 which includes Rs. 170.00 lacs for Annual Plan 1992-93.

Establishment of Computer Centre—(Rs. 200 lacs)

DESU has installed a computer of its own at Shakti Sadan and the work of energy billing has been taken up at this Computer Centre. Capacity of the present Computer Centre is proposed to be enhanced to meet the workload by procurement of a new system during the Eighth Five Year Plan.

An outlay of Rs. 200 lacs has been approved for the Eighth Five Year Plan 1992-97 and Rs. 50 lacs for Annual Plan 1992-93 for this scheme.

Energy Conservation—(Rs. 25 lacs)

An outlay of Rs. 25 lacs has been approved for this scheme during the Eighth Five Year Plan 1992-97 for a number of programmes to be executed for Energy Conservation which is essential in view of the limited potential and rapidly increasing demand for electricity in Delhi. An amount of Rs. 5 lacs has been approved for the Annual Plan 1992-93.

N D M C

New Delhi Municipal Committee is a licensee for distribution of electricity in its area of about 41.5 sq. kms. At present, bulk power is received from DESU at 33 KV and is distributed to the consumers through 11 KV and L.T. network. In future, DESU would deliver bulk power on 66 KV. So 66 KV sub-stations are being established by NDMC to receive the power from DESU, which will be distributed through the existing and newly proposed 33 KV and 11 KV sub-station.

Being the capital city, the responsibility of NDMC for maintaining uninterrupted power supply is far more compared to other areas. Most of the important consumers such as Rashtrapati Bhawan, Parliament House, All India Radio, Central Government Offices, Ministries, Diplomatic Missions, Residences of Central Ministers and MP's etc. are situated in NDMC area. Besides, there are many important hospitals, Five Star Hotels, big multi-storeyed buildings in NDMC area.

(i) *66 KV Works (Rs. 1400 lacs)*

Continuing Works of VII Five Year Plan

1. *School Lane Sub-station* : This 66 KV Sub-station was designed with indoor gas insulated 66 KV switchgear with installed capacity of 2x50 MVA on 66/33 KV and 2x20 MVA on 66/11 KV making a total capacity as 140 MVA. For economy measures, a combined board of DESU and NDMC for 66 KV GIS switchgears was proposed. This sub-station could not be commissioned in the VII Five Year Plan due to land dispute and delay in purchase of GIS Board by DESU.

The 66 KV transformers and 33 KV panels are already on site. DESU has laid 66 KV cables. Keeping in view the delay in procurement of 66 KV GIS board. It has been decided in consultation with DESU; to have a two bay 66 KV outdoor yard where the 66 KV circuits from G.T. could be terminated. This switchyard has been completed by DESU. Both the 66 KV G.T. circuits shall be energised & commissioned during this year by DESU.

However, to meet the immediate power demand one of the 66 KV circuits has already been energised on 33 KV and power on 33 KV is being delivered to 33 KV S/S Scindia House.

2. *Vidyut Bhawan Sub-station* : Like the 66 KV sub-station at School Lane, this sub-station was also designed with indoor gas insulated 66 KV switchgear with installed capacity of 2x50 MVA on 66/33 KV.

A combined board of DESU and NDMC for 66 KV GIS switchgears was proposed for which procurement action is being taken by DESU. This sub-station could not be commissioned in the VII Five Year Plan because land for the sub-station was not allotted. The Ministry of Urban Development has only recently conveyed to L & DO the sanction of the President to the allotment of land. The commissioning of the sub-station was also delayed due to the failure to import the combined board of GIS panels on the part of DESU.

In view of the delay in the allotment of land & procurement of 66 KV GIS board, it has been decided in consultation with DESU to have a 2-bay 66 KV outdoor yard where the 66 KV incoming from G.T. could be terminated. The switchgear yard has been completed by DESU. However, circuits has been charged on 33 KV, and power on 33 KV is being fed to new 33 KV Sub-station—National Archives. The 66 KV indoor sub-station at Vidyut Bhawan is likely to be commissioned, after allotment of land and construction of building and receipts of 66 KV GIS board. This is due in 1993-94.

3. *Augmentation of 66 KV Vidyut Bhawan Sub-station*

Keeping in view the construction activity in the area, it has been proposed to install 2x20 MVA 66/11 power transformers at this place increasing the installed capacity from 100 MVA to 140 MVA. The 66 KV indoor GIS board which is being procured by DESU, shall have 9 panels, four feeder panels and one coupler on the DESU's side and four transformer panels on the NDMC side.

The work shall be completed alongwith the scheme of 66 KV S/S Vidyut Bhawan.

2. *Upgradation of 33 KV sub-station Nehru Park*

There is a 1x15 MVA, 33/11 KV sub-station at Nehru Park. This sub-station is fully loaded. A lot of construction work of Embassies and State Guest Houses is going on in this area. It is therefore, necessary to upgrade this sub-station to 66 KV. DESU has been requested to provide two nos. 66 KV circuits from Ridge Valley Park Street sub-station. It has been proposed to install 1x50 MVA on 66/33 KV, 1x20 MVA on 66/11 KV and 1x20 MVA on 33/11 KV transformers making a total capacity of 85 MVA. Subject to laying of 66 KV circuits by DESU, this sub-station shall be commissioned in VIII Five Year Plan.

3. *66 KV sub-station 15, Dr. Bishambar Dass Marg*

A large nos. of buildings are under construction in DIZ area near Gole Market, like CPWD housing complex on market road and multi-storeyed buildings at Baird Road etc. To meet the power demand, a 66 KV sub-station has been proposed at 15, Bishambar Das Marg, during the VIII Five Year Plan. Ministry of Urban Development has approved the allotment of land to NDMC. It is proposed to install 1x50 MVA on 66/33 KV and 1x20 MVA on 66/11 KV transformers at this place with indoor GIS board on 66 KV side and SF-6 DBB board on 33 KV and 11 KV side. The 66 KV power shall be provided by DESU from the Park Street sub-station.

(ii) *33KV Works (Rs. 1300 lacs)*

1. *Scindia House Sub-station* : This sub-station has been designed to have 2x16/20 MVA on 33/11 Power Transformers with allied 33KV Switchgears. The building of the sub-station has been completed and most of the equipment have been procured and installed in the sub-station. With energising of one of the 66KV circuits on 33KV, temporarily at School Lane by DESU, one of the 20 MVA Transformers has been energised, The other transformers shall be commissioned during 1992-93 subject to energisation & Commissioning of the 66 KV circuit at School Lane by DESU.

2. *National Archives Sub-station* : CPWD was to provide a permanent sub-station building in the ground floor of the second phase of the multi-storeyed building at National Archives. There has been delay in construction of the National Archives Building resulting in delay in the installation of this sub-station. However, CPWD has now provided a temporary sub-station building. The sub-station has been designed with 2x16/20 MVA, 33/11 Power Transformer and allied 33 KV and 11 KV switchgears. One of the 33/11 KV transformers has been commissioned on charging of the 6 KV circuits from G.T. to Vidyut Bhawan on 33 KV temporarily. The other transformer of this sub-station is linked up with the commissioning of 66 KV S/S at Vidyut Bhawan by DESU during 1992-93 from where it is to receive power on 33 KV.

3. *Dalhousie Road Sub-station* : This sub-station has also been designed with 2x16 MVA, 33/11 KV power transformer to meet the power demand of South Avenue, South Block, Rashtrapati Bhawan. It has been decided to up-grade the existing 11 KV sub-station. The space for the installation of the equipment is available. The 33/11 KV transformer have been purchased. The power on 33 KV to this sub-station is from 66 KV S/S Vidyut Bhawan. The sub-station is to be completed and commissioned during 1993-94.

4. *Race Course Sub-station* : In order to meet the growing demand of the VIP area of Teen Murti & Race Course, a 33KV sub-station with 2x16/20MVA capacity has been proposed in old Race Course Camp. Land required for the sub-station has already been provided by Race Course authorities. Building work is almost complete. The procurement of equipment is in progress. The installation of the equipment is expected to be completed by the end of 93-94. The 33KV feeds shall be provided from S/S Vidyut Bhawan and S/S Nehru Park.

5. *Hanuman Road Sub-station* : This sub-station has been designed with 1x16/20 MVA, in order to meet the growing power demand of Hanuman Road and Baba Kharak Singh Marg area. The land is available. The building work is in full swing and the procurement of equipment is in progress. The installation of the equipment is expected to be completed by the end of 1993-94.

6. *Safdarjung Airport* : To meet the power demand of Jorbagh, Lodhi Road and Airport Area, there was a proposal to upgrade the existing 11KV sub-station Qutab Road at Arbindo Marg to 33 KV sub-station. However, additional land required could not be arranged. In the mean time, National Airport Authority requested for release of load to their operational complex under construction at Safderjung Airport. National Airport Authority was persuaded to give a piece of plot for constructing a 33KV sub-station. The sub-station has been designed with 2x16/20MVA on 33KV/11KV. The building work is in full swing. The procurement of equipment is in progress. The installation of the equipment is expected to be completed during the year 1993-94. The 33KV feeds shall be provided from Vidyut Bhawan Sub-station.

7. *Shahjahan Road* : It has been proposed to upgrade the existing 11KV sub-station at Shahjahan Road to 33 KV sub-station to meet power requirement due to development work going on in the area of Shahjahan Road, Pandara Road, Khan Market etc. Land is available for the purpose. The sub-station has been designed with 2x16/20MVA on 33/11KV. The building is likely to start in 1993-94 and major equipment shall be procured and installed in 1994-95. The sub-station is likely to be commissioned during the VIII Plan period.

8. *Church Road* : The power demand of Parliament House, North Block, Rashtrapati Bhawan and the near by area of North Avenue has increased considerably. For better power supply to Rashtrapati Bhawan and in-accordance with the recommendation of the high power committee, CPWD has established a new 11KV sub-station in Rashtrapati Bhawan. CPWD has also requested for strengthening of power supply system to North Block & North Avenue. In order to meet the additional power demand and to improve the reliability of supply to these important complexes, it is necessary that a 33 KV sub-station is established in this area. L & DO has been requested to allot the land and CPWD is also pursuing the matter. This sub-station has been designed with 2x16/20MVA capacity on 33/11KV. The building work shall be taken up after allotment of land to NDMC.

9. *33KV Interconnectors/Feeders* : Between the various 66KV Sub-station and 33KV Sub-stations, following 33KV Feeders/Interconnectors have been proposed during VIII Plan.

The details are as below :—

1. Shahjahan Road : Feed to be given from 66KV Vidyut Bhawan S/S with 2 x 300mm²/3C XLPE Cables.
2. Church Road : Feed to be given from 66KV Dr. Bishambar Dass Marg S/S with 2 x 300mm²/3C XLPE Cable.
3. Hanuman Road : Feed/inter-connector between 66 KV sub-station at Bishamber Dass Marg—33 KV sub-station at Hanuman Road with 1 x 400 MM²/3 C XLPE Cable under the details after Church road. (2)

(iii) *11 K. V. & L. T. Works (Rs. 1300 lacs)*

The maximum demand of the electricity at the end of 1990-91 was 300 MVA and peak load observed during 1990-91 was to the tune of 214 MVA. The target peak load during 1991-92 was 340 MVA against which the achieved target was 233 MVA.

It has been proposed to modernise the power distribution system in N.D.M.C. area by using latest technical know how. The following systems are proposed to be introduced during the 8th Plan :—

1. Telemetering of Electric Sub-stations.
2. Using P.C. for data collection in power distribution system.
3. Remote control system for electric sub-stations.

The following new schemes have been proposed :—

1. *Establishing Switching Station in N.D.M.C. area*

Switching Station at Chanakya Puri Guest House, Chanakya Puri Diplomatic Enclave (Bardolai Marg), Sarojini Nagar Market, National Gallery of Arts, Jaipur House, State Bank of India, A.I.R., Maha Deva Road.

2. *Establishing Electric Sub-station in N.D.M.C. area*

Kotah House, Railway Colony, Sarojini Nagar I & II, Safderjung Hospital Flats, 14-Krishna Menon Lane, 17-Bhai Veer Singh Marg, Factory Road, Minto Road, Plaza Bus Stand Connaught Place, R.K. Puram Sec.-13, Y.W.C.A., Racab Ganj Road, Lodhi Estate, South Avenue.

3. *Augmentation of Electric Sub-station*

Indian Oil Bhawan, Moti Bagh, Janpath Lane, Aurangzeb Lane, Golf Link-II, Akbar Lane, 22-Bara Khamba Road, 6-Jantar Mantar Road, Bihar Bhawan, Sarojini Nagar I-Block & C-Block.

Apart from above proposals, existing H.T. feeds will also be augmented in addition to providing new H.T. feeds, as per the requirement. It has also been proposed that capacitor bank of 35.28 MVAR capacity be added in the system.

The total approved outlay for 11 KV and L.T. distribution is Rs. 1,300 lacs for the 8th Five Year Plan, which includes Rs. 250 lacs for Annual Plan 1992-93.

D. E. D. A.

1. *Non-conventional Urban Energy Programme (Rs. 420 lacs)*

Initially the implementation of Non-conventional Urban Energy Programme was started during the year 1984-85 along the lines of the IREP programme. Schemes included sale of Solar Cookers, installation of Domestic & Institutional Solar Water Heating Systems, sale of portable chulhas, installation of wind mills, arrangement of exhibitions etc. The main idea was to popularise non-conventional devices among the urban people. The Agency undertook demonstration programmes at various important places in the National Capital Territory of Delhi and installed Domestic & Institutional Solar Water Heating Systems at various Govt. buildings/residential buildings.

The achievements during the last 7 years are summarized below :

S. No.	Name of Item	Achievements upto March 1992
1.	Solar Cooker	20,548
2.	D.S.W.H.S.	848 nos.
3.	I.S.W.H.S.	6,28,500 LPD
4.	Portable Chulha	40,772
5.	Wind Mill	10

A. *Solar Water Heating System*

In order to popularise the solar thermal devices and to save energy, this agency is providing subsidy to consumers from 30% to 60% depending upon the category of users to which it belongs like private/public sector/Govt. organisations/educational and other institutions etc. It is essential to continue the subsidy during the 8th Plan in order to popularise and promote the use of institutional solar water heating systems. Only recently DNES has revised its subsidy linking it to collector area instead of linking it to cost of the system. This would increase the incidence of burden of subsidy on Delhi Admn. funds. 25 systems of 100 and 200 LPD capacity are also proposed to be installed for demonstration purposes. Delhi Admn. will provide funds for the same. The 8th Plan and Annual Plan 1992-93 targets are as follows :—

	1992-93	1992-97
Physical targets	1.28 lac LPD	6.00 lacs LPD (Six lacs)
Financial requirement	Rs. 55 lac	Rs. 200 lacs

B. *Solar Cooker*

The Eighth Plan target is to sell 12,500 solar cookers of which 2500 solar cookers are proposed to be sold during the Annual Plan 92-93. About 30 solar cookers, are proposed to be given on demonstration basis also. Rs. 8.50 lacs are required for 1992-93 and Rs. 42 lacs for the Eighth Plan, if DNES continues the existing subsidy pattern.

C. Improved Chulha (Portable)

Portable chulhas are popular in the J. J. Colonies and urbanised villages where wood is used. By introducing portable chulhas we can save 25% to 30% conventional fuel as compared to the traditional chulhas. During the Annual Plan 1992-93 it is proposed to sell 5000 portable chulhas and a sale target of 25000 portable chulhas has been fixed for the 8th Plan.

Govt. of India is providing 50% subsidy to the general category and 75% to the SC & ST families on the sale of portable chulhas.

D. Construction of Office Building at Tuglakabad, Delhi

At present, the DEDA office is housed in a small leased building at Timarpur, Delhi. It is short of space and therefore, an office building has been approved. The Agency has acquired 1000 sqm. plot at Tuglakabad in South Delhi for constructing this office. The estimated cost of the building will be Rs. 50 lacs approx. and it will be completed by 1993-94.

(E) Organization of Exhibitions

Exhibitions are a highly effective medium for the popularisation of Science & Technology. It offers a unique opportunity for instant information and interaction with visitors by the trained Demonstrators.

In the recent past, DEDA has promoted several devices based on alternative energy sources which have found acceptance among the public. DEDA has been participating in all the important exhibitions of the Administration.

For the successful implementation and propagation of various Non-conventional Energy Projects, there is a proposal for organizing 100 exhibitions at various places during the Eighth Five Year Plan in the National Capital Territory of Delhi.

F. STAFF

The following posts are proposed to be created during eighth five year plan :—

S. No.	Name of post	No. of posts	Pay-scale
			Rs.
1.	Director (Sr. Scale or selection grade IAS Officer)	1	
2.	Dy. Director	1	3000-4500
3.	Executive Engineer/Project Manager	1	3000-4500
4.	Asstt. Engineer	1	2000-3500
5.	Sr. Scientific Officer	1	2200-4000
6.	Scientific Officer	1	2000-3500
7.	Chief Accounts Officer	1	3000-4500
8.	Accounts Officer	1	2375-3500

9. Asstt. Director (Admn.)	1	7200-4000
10. Lady Co-ordinator	1	1640-2900
11. Admn. Officer	1	2000-3500
12. Private Secy. to Director	1	2000-3500
13. Office Supdt.	1	1640-2900
14. Head Clerk	1	1400-2300
15. Sr. Stenographer	1	1400-2300
16. Jr. Engineer (Mech. 2, Civil 2)	4	1400-2300
17. Accountant	1	1640-2900
18. Statistical Asstt.	1	1400-2300
19. Stenographer	3	1200-2040
20. U. D. C.	4	1200-2040
21. Draftsman	1	1200-2040
22. Store Keeper	1	1200-2040
23. Caretaker	1	1200-2040
24. Sales Supervisor	2	1200-2040
25. Vehicle Supervisor	1	1200-2040
26. Cine Operator	1	950-1500
27. Mechanic	5	950-1500
28. L. D. C.	4	950-1500
29. Surveyor	1	950-1500
30. Plumber	1	950-1500
31. Demonstrator	10	950-1500
32. Driver	11	950-1500
33. Daftry	1	800-1150
34. Peon/Helper	6	750-940
35. Chowkidar	5	750-940

An outlay of Rs. 420 lacs is approved for this scheme for eighth five year plan which includes Rs. 100 lacs for 1992-93.

2. *Plying of Battery Bus (Rs. 300 lacs)*

The Agency has a fleet of 100 Battery Buses which have been plying on various congested routes in the walled city, Trans-Yamuna and New Delhi areas.

The Battery Bus scheme was started in the year 1984. This was mainly research & development scheme in the initial stage, and soon gained public acceptance.

A sum of Rs. 3.00 crores has been approved for the 8th plan of which Rs. 80.00 lacs has been allocated for 1992-93. The head-wise detail of approved outlay will be as follows :

		(Rs. in lacs)
S. No.	Description of item	Provision for the year 1992-93
1.	Replacement of old battery sets @ Rs. 1.2 lac each set	34
2.	Repair of choppers	2
3.	Chargers 5 nos. @ Rs. 20,000 approx.	1
4.	Carbon brush and spring holders from BHEL	2
5.	Operation & Maintenance	11
6.	Salaries	30
		80

Details of outlays provided for Eighth Plan 1992-97

S. No.	Description of items	Provision for Eighth Plan 1992-97 (Rs. in crores)
1.	Replacement of old battery sets—100 sets @ Rs. 1 lac	1.00
2.	Modification of the battery buses i. e. quick battery charging system in 40 nos. Electravans @ Rs. 25000/-	0.10
3.	Purchase of spare parts such as chopper controllers, meters, carbon brush, spring holder from BHEL etc.	0.10
4.	Operation & maintenance of BOV	0.30
5.	Staff Salary	1.50
		3.00

The year-wise phasing of the approved outlay for the entire Eighth Plan will be as follows :—

Year	1992-93	1993-94	1994-95	1995-96	1996-97
Outlay	80	55	55	55	55

36. Sanitary Landfill Scheme (Rs. 25 lacs)

Recovery of energy from sanitary landfill is a concept by virtue of which we may not only recover energy but solve the problem of pollution also.

During the 7th Five Year Plan, DEDA had taken steps for the recovery of energy from such landfills and the project set up at Timarpur is a model in this field. This project is supplying cooking gas/electricity to about 30 households in Balak Ram Hospital and Delhi Adm.n. flats, in Timarpur since 1986. The Timarpur Project has a capacity to feed about 200 families.

In view of the success of the pilot experimentation, there was a plan to set up projects at one more landfill site at Sanjay Gandhi Transport Nagar but this could not be implemented for want of some administrative decisions and for want of permission to acquire space from MCD for the construction of temporary sheds at the proposed site for the installation of the plant and machinery.

An outlay of Rs. 25 lacs has been allocated for the scheme for the eighth five year plan to take up more sanitary landfill sites for energy generation. This includes Rs. 5.00 lacs for Annual Plan 1992-93.

4. Energy Plantation Scheme (Rs. 55 lacs)

Delhi Energy Development Agency has acquired village Panchayat land on lease basis in 11 villages of the 5 rural Blocks. DEDA is developing this land as non-conventional energy parks where the live demonstration of various new and renewable energy devices have been shown to create an awareness about the various uses of non-conventional and energy conservation devices. The scheme was taken over by DEDA during the year 1991 for the first time and 27,500 plants of various kinds have been transplanted. During 1991-92, 29,000 nos. of plants have been planted. The Gram-Panchayat have given this land on lease to DEDA. This has saved the land from encroachment. The scheme also promises employment to the local villagers.

During the year 1991-92, Rs. 21.07 lacs have been spent on the scheme. The major expenditure was on payments to labourers, fencing of land and other expenditure for the plants.

Details of sites with area of land for energy plantation

S. No.	Name of site	Area in acre
1.	Bakoli Energy Complex	16.50
2.	Mandoli Energy Complex	3.00
3.	Rewlakhapur	4.00
4.	Libaspur Energy Complex	1.63
5.	Kanganheri Energy Complex	1.50
6.	Palam Energy Complex	2.25
7.	Dera Energy Complex	4.50
8.	Samaspur Khalsa	75.00
9.	Ujwa	150.00
10.	Gazipur BGP	6.00
11.	Gadaipur surplus land	5.00
		<u>269.38</u>

For the Eighth Plan Rs. 55 lacs have been allocated for this scheme. This includes Rs. 15.00 lacs for Annual Plan 1992-93.

Head-wise details of funds of Rs. 15 lacs during the year 1992-93 is as follows:

	(Rs. in lacs)
1. Expenditure on the salary of the supervisory staff and the daily wagers.	4.72
2. Expenditure on casual labourers	1.85
	<u>6.57</u>
3. <i>Purchase of items</i>	
(i) T & P Items	0.25
(ii) Plant & Material	1.25
(iii) Manure & Fertilizer	1.00
(iv) Insecticides & Pesticides	0.50
_____ndries	0.50
_____ood earth & water tankers etc.	0.68
_____ivil works in Hort. like fencing boring, G. I. items etc.	4.00
	<u>8.43</u>
Total	Rs. 15.00 lacs

staff requirement

S. No.	Name of post	No. of post	Pay-scale
1.	Hort. Officer	1	Rs. 2000-3500
2.	Hort. Asstt.	5	Rs. 1400-2300
3.	Labourers	40	on daily wage basis or on mustor roll basis to maintain the existing complexes.

VII. INDUSTRIES AND MINERALS

Industrial development in Delhi has its own limitations. Being a predominantly urban area with a rate of growth of population double to that of the national average, industrial growth in Delhi has to be contained in view of scarcity of land and pressure on civic amenities. To curtail the current trend of migration, Delhi Admn. has decided to go in for small scale industries only and, that too, in selected areas.

The Industrial Policy Statement, 1982, envisages setting up of only high-tech industries, non-pollutant and non-hazardous industries, high value added production industries which require less space, less power consumption and skilled manpower. This industrial policy also laid emphasis on promotion and development of traditional industries like handicrafts, handlooms, khadi and village industries and household industries so as to provide better employment opportunities to the artisans engaged in these industries as these are mostly non-pollutant and non-hazardous and require less space and consume less power. At present only small scale industrial units are being allowed to be set-up fulfilling the above mentioned requirements. Industries which require more than 30 KV (40 HP) power are not being registered, as a general rule.

In view of the imperative of decongestion, no new proposal has been included in the 8th Five Year Plan for development of industrial estates. On the other hand the Administration has decided to set-up new modern technology training institutions so as to make available trained manpower to the existing industrial units of Delhi with a view to improve their quality and to enable them to increase their exports.

During the 7th Five Year Plan a number of projects comprising of flatted factories, industrial sheds, industrial work centres and industrial plots were taken up and completed. Facilities, by way of better civic services, common treatment plants, training centres, supply of raw materials, incentives for better performance and export as well as financial and other assistance have been extended. The 8th Five Year Plan will aim at maximum utilisation of the infrastructure already created in this Territory.

The Industries Sector is the second major contributor in the Net State Domestic Product of Delhi after the Tertiary Sector. The contribution of Industries Sector in the Net State Domestic Product of Delhi in 1984-85 (at current prices) was 20.7% and it increased to 25.5% in 1989-90.

The major achievements of the 7th plan period are elucidated below :—

Infrastructural facilities

Construction of 571 flats at the Flatted Factories Complex at Rani Jhansi Road was completed and allotment done during the 7th Five Year Plan.

In the functional Industrial Estate at Patparganj, 500 plots have been developed and these have been allotted after a draw of lots in January, 1990. Out of about 1200 plots planned for development on an area of 612 acres in Narela Industrial Complex by the DSIDC, about 1535 plots have already been allotted through a draw

of lots in May, 1990. The development of Phase-III of Badli Industrial Estate is almost complete in which 47 plots have been developed. In fourth and final phase of development of Okhla Industrial Estate, development of 30 plots and construction of 18 sheds has already been done. As many as 2919 low cost work centres have been built at 25 clusters for providing work places to scheduled castes/economically weaker sections of society.

Financial Assistance

The Delhi Financial Corporation provides financial assistance for fixed assets. Financial assistance is provided for setting up a new industrial units as well as for expansion, modernisation, diversification etc. The Corporation also has schemes for financing small entrepreneurs belonging to weaker sections of society, special categories like women entrepreneurs, technically qualified persons, physically handicapped, ex-servicemen etc. Delhi Khadi & Village Industries Board is providing financial assistance to Khadi & Village Industries by drawing funds from Khadi & Village Industries Commission. Delhi Scheduled Caste Financial & Development Corporation is also providing loan to SC families who want to set up their own enterprises.

Technological Support

A Tool Room & Training Centre is functioning at Wazirpur since 1978. The centre imparts training for Tool & Dye making, Tool designing etc. It produces high quality tools for small scale industries and also gives technical assistance to them. The activities of this centre have been expanded in 7th Five Year Plan. Necessary machines have been provided to the centre keeping in view the upgradation in technology and training in computer science has also been introduced. The Testing & Development Centre at Okhla is providing the requisite facilities to small scale electronic industries in Delhi. The Department of Industries had set up a testing laboratory for the implementation of compulsory Quality Control Order of 1981 & 1988 on house-hold electrical appliances in Delhi at the ISBT Building. The laboratory has been activated to test the samples being received voluntarily and as well as through ISI. Necessary steps have been taken to set up a Hi-Tech. Vocational Training Centre for training and production of computerised numerically-controlled machines using latest technology in collaboration with the Italian Govt.

Assistance to Industries Employing Weaker Sections of Society

Construction of Weavers Worksheds-cum-Residential Accommodation at Bunkar Vihar, Nand Nagri is likely to be completed. The Complex has 30 weavers worksheds with 120 dwelling units. Two more worksheds for Weavers are already allotted to Weavers Co-operative Societies.

At Weavers Colony at Bharat Nagar set up in the past by this department to provide modern accommodation at cheap rent to Weavers' Co-operatives, facility of dye house is proposed to be provided for which construction work is in progress. This colony is already having a Weavers' Service Centre. To boost the sale of handloom goods, the scheme for rebate on sale of handloom continued in 7th Five Year Plan. The weavers were also assisted by way of subsidy & loan for purchase of improved tools/looms etc. With a view to encourage handicraft industry, the schemes for imparting training, giving awards etc. and organising bazars continued.

Leather goods flatted factories were set up at Wazirpur. This colony was provided a Common Facility Centre in which necessary machines were added. A Common Facility Centre for the leather units has also been set up at Jhandewalan Flatted Factories Complex recently to serve the small leather units in nearby areas.

Institutional Support

The Delhi State Industrial Development Corporation is serving the Small Scale Industries by providing them necessary help and guidance. The Corporation procures and distributes indigenous controlled raw material. It has also taken up development of infrastructural facilities. During the 7th plan it has constructed 104 sheds on self financing basis. It is providing marketing facilities also. Narela Industrial Complex is also being developed by DSIDC.

Self Employment

A society for Self Employment was established by Delhi Administration to provide training to the educated un-employed youth of the Territory to enable them to become self employed by setting up their own service centres/establishments or seek gainful employment. After the society became functional w. e. f. 1-4-87, 1055 persons have been trained so far.

In financial terms, achievements of the Seventh Five Year Plan were as under :—

For the Seventh Five Year Plan, there was an approved outlay of Rs. 6310 lakhs for the Industry Sector. As against this, an expenditure of Rs. 5233.43 lakhs had been incurred. The sub-head-wise position is as under :—

Sub-head	(Rs. in lacs)	
	7th Five Year Plan 1985-90	
	Agreed Outlay	Actual Expd.r.
I. Village & Small Industries		
1. Small Scale Industries	2200.00	2444.48
2. Industrial Estates	2600.00	1446.20
3. Khadi & Village Industries	70.00	135.10
4. Handloom Industries	250.00	456.48
5. Handicrafts	40.00	33.17
Total (VSI)	5160.00	4515.43
II. Medium & Large Industries	330.00	400.00
III. Mining	820.00	318.00
Grand Total	6310.00	5233.43

Annual Plans 1990-91 & 1991-92

(Rs. in lacs)

Sl. No.	Name of Scheme	1990-91		1991-92	
		Approved	Expendi- ture	Approved outlay	Expendi- ture
1	2	3	4	5	6
<i>I. Village and Small Industries</i>					
	Small Scale Industries	409.60	710.60	547.50	669.02
	Industrial Estates	231.40	158.74	215.00	562.98
	Khadi & Village Industries	60.00	59.00	70.00	40.79
	Handloom	59.00	78.19	47.50	29.07
	Handicrafts	10.00	8.42	10.00	7.60
	Sub-Total	770.00	1014.95	890.00	1309.46
<i>II. Industries other than VSI</i>					
		130.00	110.00	110.00	—
	Total	900.00	1124.95	1000.00	1309.46

Eighth Five Year Plan (1992-97) and Annual Plan (1992-93)

The Eighth Five Year Plan has been prepared keeping in view limitations of land and power and other characteristics of the National Capital Territory. The National Capital Region Plan and 2nd Master Plan for Delhi have also been taken into consideration. Keeping all these factors in view, the emphasis in the Eighth Five Year Plan would be on the following :—

- (i) Only non-pollutant small scale industries with low power consumption and less space requirement generating employment preferably for skilled personnel would be encouraged. No new large and medium scale industry would be allowed to be set up in the Territory.
- (ii) New schemes for development of infrastructure in the form of new flats/sheds, and plot based industrial estates have not been proposed.
- (iii) Encouragement to Hi-Tech. and sophisticated small scale industries producing high value added goods will continue.
- (iv) Modernisation and technical upgradation in small scale units.
- (v) Development and expansion of institutions such as TRTC, Hi-Tech. Vocational Training Institute, Auto Parts Development Centre, Polymer & Plastic Development Centre, Product-cum-Process Development Centre for Electrical Appliances.

- (vi) Quality Control
- (vii) Pollution Control
- (viii) Encouragement to Electronic, Plastic, Light Engineering, Garments, Handloom, Handicraft & Leather Industries.
- (ix) Export promotion.

An outlay of Rs. 3000.00 lakhs has been approved for the 8th Five Year Plan 1992-97 which includes Rs. 600.00 lakhs for 1992-93.

The sub-head-wise position is as under :—

(Rs. in lacs)			
Sl. No.	Name of Scheme	8th Five Year Plan (1992-97)	1992-93
		App. Outlay	App. Outlay
1	2	3	4
<i>I. Village & Small Industries</i>			
	Small Scale Indus.	1498.10	228.10
	Industrial Estates	805.40	212.45
	Khadi & Village Inds. (including Block Loan)	275.00	55.75
	Handloom	170.50	32.70
	Handicrafts	50.00	10.00
	Sub-Total	2799.00	539.00
	<i>II. Industries other than (VSI)</i>	201.00	61.00
	Total	3000.00	600.00

The scheme-wise details are given below :—

1. Strengthening of Industries Department—(Rs. 5.00 lacs)

1.1 The Department of Industries also functions as the Secretariat for the Delhi State Industrial Development Corporation, Delhi Financial Corporation, Delhi State Mineral Development Corporation, Khadi & Village Industries Board, Tool Room Training Centre, at also the Society for Self Employment.

1.2 The AR Deptt. has recently examined the workload of the industries deptt. with a view to ascertain staff requirement. Report from AR Deptt. is awaited. However, during discussions, the study team observed that existing staff was adequate.

1.3 The budget allocation for strengthening of the department has been reduced to Rs. 5.00 lakhs from Rs. 45.00 lakhs for the 8th Five Year Plan. The allocation of Rs. 5.00 lakhs has been retained to re-align the existing posts of this deptt. by abolition/creation. For the Annual Plan 1992-93, an outlay of Rs. 2 lakhs is approved for creation of some new posts.

2. *Renovation and Improvement of Office Building—(Rs. 35.00 lacs)*

The office of the Industries Department at Kashmere Gate is functioning in an old building in a dilapidated condition. This building has almost outlived its life. Major repairs/improvement are required. It is, therefore, proposed to carry out major repairs/improvement such as construction of sheds for parking of office vehicles, replacement of roof and flooring etc. during 8th Five Year Plan. A sum of Rs. 35.00 lacs is approved for these purposes during the 8th Five Year Plan 1992-97 and Rs. 2.00 lacs for 1992-93.

3. *Tool Room & Training Centre—(Rs. 421.60 lacs)*

The Tool Room and Training Centre was set-up with the technical and financial collaboration of the Govt. of India and the Govt. of Denmark with the objective of imparting training in tool engineering, and services like technical consultancy, fixtures etc.

The agreement between the Government of India and Govt. of Denmark expired on 31-12-1984 and was renewed on 2-6-1989. The basic aims of the agreement is to increase the training activities of the centre. The Centre is spending approximately Rs. 40.00 lakhs per year on its training activities which is being financed by its Production Department.

The Centre proposes to implement its modernisation plan in a phased manner under different schemes as given below :—

A. *Scheme-I (Under DANIDA Assistance)*

An amount of Rs. 300.00 lakhs is to be received in kind (in the form of spare parts, training equipment and replacement of old machines etc.) from DANIDA during the 8th plan period. The Centre will be required to pay customs duty for which grants-in-aid of Rs. 100.00 lakhs has been projected during the 8th plan period for customs duty and sales tax to be paid on the spares and equipments to be received under Danish assistance. This scheme has already been approved by the Govt. of India and an agreement has been signed between the Govt. of India and the Govt. of Denmark on 2nd June, 1989. According to this agreement, the following assistance is expected from the Danish Govt. :—

	(Rs. in lacs)
(1) Maintenance System	1.50
(2) Machinery, equipment and Spare Parts (Prod. Deptt.)	42.00
(3) Machinery, equipment and Spare Parts (Trg. Deptt.)	192.10
(4) Consultancy Cell	52.00
Total	287.60

B. Scheme-II (Under Delhi Admn. Assistance)

The Centre proposes to go in for installation of essential equipment and setting up a "Documentation Centre". The following plan of action has been prepared which shall be carried out with the funds to be released to the centre as grants-in-aid by Delhi Administration, during the 8th Plan period.

(a) Documentation Centre—(Rs. 10.00 lacs)

The Centre has a small library which is not well equipped. The scheme proposes to extract technical data from various journals which will be utilised by the staff and the industries concerned through consultancy outlets. It is estimated that Rs. 10.00 lacs will be required for this purpose during the 8th Plan @ Rs. 2.00 lacs per year.

(b) Machinery and equipment—(Rs. 186.60 lacs)

It is proposed to acquire certain CNC machines together with some conventional machines. It is also proposed to acquire air-conditioning equipment for the CNC machines, details of which are as under :—

1. Wire cut electric discharge machine—1
2. CNC-Copy milling machine—1
3. CNC-Electric discharge machine—1
4. CAD/CAM—1
5. Coordinate measuring machine—1
6. Tool and cutter grinder—1
7. Air-conditioning equipment

The estimated cost of the above machinery and equipment is Rs. 186.60. lacs.

(c) Recurring grant-in-aid—(Rs. 125 lacs)

The performance of the Centre in respect of training programmes being run by it is quite satisfactory. However, due to a fall in production, it suffered losses during the year 1990-91. It is, therefore, proposed to release some grant-in-aid to the centre to cover losses and part of the cost of training during the 8th Plan period.

It is proposed to release Rs. 125 lacs under the scheme for recurring grant-in-aid during the 8th Plan period.

Recurring grant-in-aid shall be given on a tapering basis. During the last two years of the 8th Plan period only Rs. 5.00 lacs each year shall be released to cover the property tax of the building.

Accordingly a sum of Rs. 421.60 lacs is approved for the 8th Five Year Plan 1992-97 and Rs. 70.00 lacs for 1992-93.

4. *Setting up of "High-Tech. Vocational Training Centre" with Italian Assistance—
(Rs. 300.00 lacs)*

Vocational Training Centre with Italian assistance is being set up at Okhla to provide training in the following courses :—

- (i) Computerised Numerical Control/Machine Tool Operator.
- (ii) Computer Aided Design/Computer Aided Operation (CAD/CAM Operator).
- (iii) Designers for Industrial and Digital Electronics Controls.
- (iv) Maintenance of Electronics, Pneumatic and Olcodynamic Control.
- (v) Automated Production Technician.
- (vi) Metrological Lab. Technician and
- (vii) Informatics.

4.2. As per the original project proposal the total contribution from the Italian side was of the order of Rs. 570 lacs. Contributions from the Govt. of India/Delhi Admn. to cover the expenditure of land and building, custom duty on imported machinery and other equipments, furniture etc. had been estimated at Rs. 372.40 lacs and a provision of Rs. 350 lacs was made in the 7th plan to implement this project. An amount of Rs. 1298.40 lacs has been released to the Society upto 91-92 for purchase of land, construction of building and for payment of custom duty in respect of machinery received as aid from Italian Government. Out of this amount Rs. 149 lakhs has been released to the DSIDC for construction of the project building.

4.3. The project, as envisaged at the time of its preparation was of the order of Rs. 9.42 crores. The cost of the project was worked out again in 1989 as there had been cost over-runs because of increase in the price of land, the cost of construction of the building, custom duty of machinery and change in exchange rate. The total cost of the project was worked out as Rs. 16.66 crores. Out of this, Delhi Admn. was to bear an expenditure of Rs. 748.98 lacs and the balance was to be received as aid from Italian authorities in the form of machines and technical expertise including technical know how. Any escalation on account of land and building and custom duty on machinery is to be the commitment of Delhi Admn. The entire machinery that was proposed to be supplied by Italian authorities has been received in India and has been cleared by the custom authorities except two containers which are also likely to be cleared soon. The actual custom duty has been worked out at Rs. 949.00 lacs as against an estimated figure of Rs. 400.00 lacs approx. This is mainly because of subsequent increase in the custom duty rate and changes in the exchange rates that resulted in appreciation of the Italian Lira.

4.4 The machinery has already arrived and the building is under construction. An amount of Rs. 300.00 lacs is approved for the 8th plan to cover, the short-fall in recurring and non-recurring requirements. For A. P. 92-93, an outlay of Rs. 20 lacs is approved for release to the Managing Society of this centre.

5. *Setting-up of an Auto Parts Development Centre with UNDP Assistance—
(Rs. 10.00 lacs)*

5.1 It is proposed to set-up an "Auto Parts Development Centre" in Delhi with the objective of assisting small scale and ancillary auto parts manufacturers, through provision of testing facilities, consultancy services and trained manpower. The Ministry of Industry have agreed in principle, to set-up the proposed centre.

5.2 The project was referred to the Govt. of India for approval. The matter was subsequently discussed in the Ministry of Industry and UNDP and it was decided to implement the project in the two phases. The first phase is proposed to be implemented with UNIDO assistance and the second phase with UNDP assistance. Accordingly, the project reports in respect of phase one and phase two have been prepared and referred to the Govt. of India for clearance. The cost of the project stands revised because of increase in cost of land and building and the cost of machinery. Delhi Administration's contribution to this project is estimated at Rs. 400 lacs.

5.3 An amount of Rs. 10.00 lacs is approved for the 8th plan period and a token provision of Rs. 0.50 lac for 1992-93.

6. *Setting up of a Polymer and Plastic Development Centre in Delhi (Rs. 1.00 lac)*

6.1 The objectives of the Centre are to upgrade the production and technology level in polymer and plastic processing industries through induction of improved and new processes, new products and product designs, better production techniques, improvement in quality and generation of trained manpower particularly for the small scale industries.

The total cost of the project as envisaged at the time of preparation was of the order of Rs. 437.00 lacs but due to revised cost of land and building and also the cost of machinery and custom duty etc., the cost of the project will increase.

Since a final decision to implement the project is yet to be taken a token provision of Rs. 1.00 lac for the 8th plan is provided.

7. *Udyog Sadan (Rs. 10.00 lacs)*

Udyog Sadan will provide office space to the Industries Deptt., DSIDC, DSMDC, KVIB, DFC. One building of Udyog Sadan near Qutub Minar has been constructed and during eighth plan one more building is proposed to be constructed to accommodate all undertakings of the Industries Deptt. As land is yet to be acquired for this purpose, a token provision of Rs. 10 lacs has been approved for this scheme in the 8th five year plan.

8. *Share Capital to DSIDC (Rs. 200.00 lacs)*

The financial base of DSIDC requires to be strengthened further during the 8th five year plan. 2919 Industrial Work Centres constructed by Industries Deptt. have also been transferred to DSIDC in 1991-92. Narela Industrial Complex is also being developed besides maintaining industrial sheds already developed. Delhi Admn. will provide share capital contribution of Rs. 200 lacs to DSIDC during the 8th five year plan. In the first year of the 8th plan i.e. 1992-93, share capital of Rs. 50 lacs will be provided to DSIDC.

9. *Environment Education & Clean Process Technology (Rs. 50.00 lacs)*

With the rapid growth of industry in Delhi, it has become essential to educate the industrial units in existence as well as the new industrial units to impart training in following the norms and procedures to maintain a pollution free atmosphere. The DSIDC proposes to educate the industrialists in this direction by imparting training

as well as by establishing modern units in clean process technology. A sum of Rs. 50.00 lacs is approved for the 8th Plan and Rs. 1.00 lac for 1992-93 for this purpose.

10. Setting-up of Product-cum-Process Development Centre for Electrical Appliances in Delhi (Rs. 10.00 lacs)

10.1 This scheme/project was to be executed with the help of a donor country under the UNDP Programme. Initially the project was to commence with a contribution of Rs. 88.00 lacs by Delhi Admn. in terms of land and building etc; and contribution of Rs. 57.75 lacs from a donor country under the UNDP Programme, in the form of machinery technical know-how and for other related items.

10.2 In keeping with the prescribed procedure a UNDP expert from the GDR visited Delhi in August-September 1989 and submitted a report which inter-alia stipulates that the share of the donor country would have to be Rs. 145 lacs on account of plant and machinery and related technical know-how, while the contribution of Delhi Admn. will also to be the tune of Rs. 145 lacs for provision of land, construction of building, office equipment and staff etc.

10.3 Project profile prepared by the expert of GDR, who visited Delhi under UNDP directives, was sent to concerned agencies of the Govt. of India such as DC (SSI), Department of Indl. Development M/o Ind. and Department of Economic Affairs, M/o Finance, for its inclusion in the country Programme-IV (CP-IV) for getting UNDP assistance for the execution of the project.

10.4 The proposal has since been recommended to M/o Finance, Department of Economic Affairs, New Delhi by the Department of Industrial Development, M/o Industry for its inclusion in CP-IV. As final approval of GOI is yet to be received for this project, only token provision of Rs. 10 lacs has been made in the eighth five year plan.

11. Quality Marking Scheme for Domestic Electrical Appliances—(Rs. 10.00 lacs)

Testing equipment is needed to check the goods produced by the Manufacturers before trading/sale in the market.

Govt. of India has also promulgated Electrical Appliances (QC) Order, 1981 on 18-3-1988 covering 7 items of QC Order, 1981 for Compulsory ISI Certification Mark and since the issue of the said Order dated 18-3-1988, seven items which were earlier covered under the QC Order, 1981 have now come under the purview of QC Order of 1988 for Compulsory ISI Certification Licence.

2050 Manufacturer's Certificates have so far been issued to the small scale units engaged in manufacture of Household Electrical Appliances under Household Electrical Appliances (QC) Order, 1981 in National Capital Territory of Delhi.

Delhi Admn. has set-up its own Testing Lab. at ISBT Building and it has started functioning from 1-8-87. During the annual Plan 1991-92 an amount of Rs. 11755/- has been earned by the Lab. by way of testing charges.

For 8th Five Yera Plan (1992-97), an outlay of Rs. 10 lacs has been approved which will be mainly used for purchase of testing equipment/contingencies.

12. Financial Assistance to Small Scale Units for Purchase of Testing Equipment (Rs. 10.00 lacs)

Testing equipments are required to check goods for quality before trading/sale of such appliances. This is laid down by the ISI and the Household Electrical Appliances (QC) Order, 1981.

2. On receipt of a number of representations from the manufacturing units about rising cost of the testing equipments & the poor financial position of the unit-holders, it was decided to formulate a scheme of financial assistance to such units for grant of financial assistance @ 25% of the total cost of the equipment or Rs. 10,000/- whichever is less. During the year 1989-90 Rs. 1.64 lacs was spent under this head for 18 units and during the year 1990-91 an expdtr. of 2.54 lacs was incurred on 26 units. The total amount spent during 1991-92 was Rs. 2.40 lacs. For eighth five year plan an outlay of Rs. 10 lacs is approved which includes Rs. 2 lacs for A.P. 92-93 for this scheme.

13. Computerisation of Records of Industries Deptt. (Rs. 20.00 lacs)

The feasibility study which was conducted in 1985-86, identified the areas for computerisation like Data of Registration, Disbursement and Recovery of Loans, Land Records, Consumption of raw materials, Accounts, Ad hoc surveys and Census etc. The deptt. intends to extend this facility to other areas such as Quality Marking Scheme, Registration of Partnership Firms and Societies, Provisional Registration etc. In the initial stage of computerisation the deptt. has purchased one PC/AT-286, for PC's and two Dot Matrix Printers. Posts of one Programmer in the scale of Rs. 2000-3500, two Key Punch Operators in the scale of Rs. 1200-2040, one Steno-typist and one Manual Attendant in the Scale of Rs. 750-940, have been filledup. The E.D.P. Cell has started functioning w.e.f. July, 1989.

The deptt. has implemented only a few applications so far since it is not possible to undertake all the applications mentioned above due to insufficient infrastructure particularly in terms of manpower and machinery. However, the following applications have been implemented so far :—

1. Registration data.
2. Land Records.
3. Recoveries of Rent and Interest.
4. Quality Marking Scheme.
5. Functional Industrial Estate.
6. Pay-roll system.
7. Compilation of manual of Instructions and Guidelines.

During the eighth plan it is proposed to implement all the remaining applications of computerisation. The deptt. therefore, proposes to procure the following additional machinery in order to cope-up with the increased volume of work and activities during annual Plan 1992-93 and in case it is not procured during the year 1992-93, the same will be procured during subsequent years of eighth plan. The following is the proposed hardware and other equipment :

1. One Super PC/AT-386 with 300 MB hard disk, 8 on-Line Terminals.
2. Two Dot-Matrix Printers—132 Column, 300 cps.

3. One Cartridge Tape Drive.
4. One Line Printer—300 LPM.
5. One Air Conditioner.
6. Telephone.

To introduce the existing and proposed applications, the deptt. will be required to handle coding and scrutiny of source documents, data entry, checking of error lists, System Designing and Software Development, processing of data and generation of Reports. It is proposed to create the following additional posts during 8th Plan (1992-97), so as to attend to the wide variety of work connected with accurate flow of inputs for the generation of various reports. The deptt. therefore, proposed to create the following posts during Eighth Plan Period :—

	Rs.	
1. System Analyst	3000-4500	One
2. Asstt. Programmer	1640-2900	One
3. Console Operator	1400-2300	One
4. Punch Supervisor	1400-2300	One
5. Data Entry Operators	1200-2040	Four
6. Manual Attendant	750-940	One

The existing space available with the EDP Cell is found to be insufficient to house all the machinery and equipments. Action to provide One more room for the EDP Cell has already been initiated by the Deptt. An outlay of Rs. 20 lacs is approved for eighth plan which includes Rs. 10 lacs for Annual Plan 1992-93.

14. G.I.A. for Industrial Pollution Control (Rs. 140.00 lacs)

The existing scheme provides for payment of subsidy to SSI/Medium Scale units who intend to install pollution control equipment. The subsidy is to be paid after such equipment are installed @ 50% of the actual cost of pollution control equipment subject to maximum of Rs. 50,000/-.

14.2 In addition to individual subsidy available to SSI/Medium Scale units, the scheme also provides for subsidising 50% of the cost of common effluent treatment plants. Remaining 50% is to be borne by the Water Pollution units whose effluent is to be treated in the plant. In addition to the capital cost, the industries are also to bear the maintenance cost of the plant. The Water Supply & Sewage Disposal Undertaking under the Municipal Corporation of Delhi is to construct and operate and maintain the common effluent treatment plants in various industrial areas where such schemes are feasible taking into consideration the effluent, availability of land for installation of common effluent treatment plant and other related factors. The schemes are to be prepared in consultation with the Central Pollution Control Board and Delhi Water Supply & Sewage Disposal Undertaking.

The total construction cost of the common effluent treatment plant at Wazirpur Indl. Area as per the revised estimates is Rs. 270 lacs. The Admn. has paid the DWS & SDU its contribution of Rs. 100 lacs.

14.4. The Industries department has conducted a survey of the various industrial areas in association with the Central Pollution Control Board and Delhi Water Supply & Sewage Disposal Undertaking to ascertain the feasibility of common effluent treatment plants in those areas. The final report including its financial viability is to be worked out by Central Pollution Control Board. The reports are yet to be received. However, it may be feasible to establish a common effluent treatment plant in Mayapuri Indl. area as per discussions with the officers of the Central Pollution Control Board. The details are being worked out.

14.5. The requirement of funds for the 8th Five Year Plan would be as under :—

	Rs.
(1) Additional 50% of the cost i.e. likely to be paid for Wazirpur Industrial area (Total cost may be Rs. 270 lacs)	35 lacs
(2) 50% of the cost to be paid for establishment of common effluent treatment plant in Mayapuri Industrial Area (Total estimated cost may be around 200 lacs)	40 lacs
(3) Provision for subsidising 50% of the cost of individual pollution control equipments subjects to maximum of Rs. 50,000/- in each case including staff components and other misc. expenditure during the 8th plan period.	65 lacs
Total	<u>140 lacs</u>

For effective control of environmental pollution and implementation of the above scheme following posts are to be created :—

(1) Adviser (Industries Pollution Control)	1	Rs. 4500-5700
(2) Dy. Director of Industrial (T)	2	Rs. 2200-4000
(3) Asstt. Director of Industries	5	Rs. 1640-2900
(4) Stenographers	3	Rs. 1200-2040
(5) UDCs	2	Rs. 1200-2040
(6) Peons	5	Rs. 750-940

For the year 1992-93 the following provision is made :

	Rs.
(1) Part payment towards 50% cost of the common effluent treatment plant at Mayapuri Industrial Area.	10.00 lacs
(2) Provision for subsidising 50% cost of the cost of individual pollution control equipments in each cases including staff component and other misc. expenditure during 1992-93.	5.00 lacs
Total :	<u>15.00 lacs</u>

A sum of Rs. 140.00 lacs is approved for the 8th Five Year Plan 1992-97 and Rs. 15.00 lacs for 1992-93.

15. *Contribution to Society for Self Employment (Rs. 110.00 lacs)*

15.1 The Society for Self Employment has been created and registered under the Societies Registration Act on 27-3-86. The training courses have been carefully selected after ascertaining the needs of Industries as well as educated unemployed youth by conducting a sample survey in representative clusters in Delhi. The target groups are those families whose annual income does not exceed Rs. 2000/- per month.

15.2 The Society has established two training centres, one at Flatted Factories Complex, Jhandewalan and another at Weavers Colony, Sunder Nagri (Nand Nagri). Five trades i.e. Repair of Radio & T.V., Fashion Designing, Refrigeration & Air Conditioning, Household electrical appliances/fittings and plumbing are run at Flatted Factories Complex in Jhandewalan, Two trades i.e. Fashion Designing Programme and Carpentry are run at Sunder Nagri Training Centre.

15.3 The unemployed youth in the Age group of 18-25 years belonging to economically weaker sections and residing in the National Capital Territory of Delhi are eligible for training in the respective trades. Upper age limit in case of SC/ST candidates is relaxable by 5 years. The training is provided free of cost to all. After successful completion of training each candidate is provided with a suitable tool-kit. This has been introduced, keeping in view the fact that the trainees belongs to the economically weaker sections and it may not be possible for them to purchase essential tools and equipment. Tool-kits also include technical books for their ready reference. So far 643 candidates have been awarded certificates and tool-kits.

15.4 The Society is now in search of new trades. The criteria would be that the trained persons are in a position to start their self-employment ventures or secure gainful employment. The yearly target of the Society by the end of this year would be 500 beneficiaries per year. In order to have a centralised office, it is proposed to obtain about Half-an-acre land at Patparganj Industrial Area and construct its own building. A sum of Rs. 110.00 lacs is approved for the Eighth Five Year Plan 1992-97 and Rs. 20.00 lacs for Annual Plan 1992-93 to provide grant-in-aid to the Society.

16. *'Margin Money for Revival of Sick Units' (Rs. 0.50 lac)*

16.1 The main aim of this scheme is to assist the State Government in reducing the incidence of sickness amongst small-scale Units and to ensure greater utilisation of capacity installed. This is a Government of India Scheme which can supplement the efforts of State Governments, Reserve Bank of India, Commercial Banks and other institution in this regard.

16.2 Under this scheme, Margin Money in the shape of loan is given to a sick unit subject to minimum Rs. 1000/- and maximum of Rs. 20,000/- per registered unit which has been set up in the preceding seven years. As this scheme did not take off inspite of best efforts, then it was decided to drop its since the scheme has been modified by the Ministry of Industry, Government of India, now loan upto a maximum of Rs. 50,000/- is proposed to be given to sick units.

16.3 In view of the above, a token provision of Rs. 0.50 lac for the 8th Five Year Plan and Rs. 0.10 lac for Annual Plan 1992-93 is provided.

17. Publicity, Promotion and Exhibition (Rs. 125.00 lacs)

17.1 The expenditure under this scheme may be broadly spelt out as under :—

A. Delhi Pavilion

- (i) Payment of ground rent and other charges, other dues to Trade Fair Authority for the Pavilion.
- (ii) Payment of property taxes and service charges etc. related to Delhi Pavilion at Pragati Maidan, New Delhi to the MCD.
- (iii) Expenditure on maintenance, watch and ward of the pavilion etc.
- (iv) Expenditure on actual display through various exhibitions.
- (B) Grant/subsidy of Delhi State Indl. Development Corpn. Ltd. or other recognised institutions of industries for participation in various trade fair/exhibitions in Delhi at Pragati Maidan and outside Delhi or any other city of the country. Grant may also be given to DSIDC Ltd. for participation in Trade Fairs abroad.
- (C) Expenditure on publicity through various media like Radio, T.V., Newspaper, publicity by brochures, booklets, hoardings and other publicity literature etc.
- (D) Any other legitimate expenditure on publicity for promotion of the industrial products of Delhi.

17.2 To continue publicity, promotion and participation in various Trade Fairs/Exhibitions/Expos and to meet all expenditure related a various above activities an outlay of Rs. 125.00 lacs is approved for 8th Five Year Plan which includes Rs. 25 lacs for A.P. 92-93.

18. Export Promotion Cell (Rs. 15.00 lacs)

18.1 An Export Promotion Cell has been set up in the Industries Department to identify and assist the exporting and export oriented units to maximise export of readymade graments, handloom and handicrafts and products of light engineering Industries. There is substantial scope for augmenting exports from Delhi.

The following important programmes are being taken up for the promotion of exports.

- (i) Incentives and assistance to exporting units.
- (ii) Expeditious processing and disposal of cases of exporting units for registration and capacity certification in half the time norms prescribed for other Industrial Units.
- (iii) Preference to exporting industries in the matter of allocation of controlled, scarce, imported raw materials.
- (iv) Grant of awards, shields, to meritorius exporting units on the basis of their export performance.
- (v) Dissemination of information about the exporting units and export potential units by publication of a Directory of Exporters.

18.2 An outlay of Rs. 15.00 lacs for the 8th Five Year Plan 1992-97 and Rs. 3.00 lacs for Annual Plan 1992-93 is approved.

19. Awards to Small Scale Entrepreneurs (Rs. 10.00 lacs)

19.1 As desired by the Govt. of India, a Scheme has been formulated for extending Awards for promoting entrepreneurship and for recognising the achievements of successful entrepreneurs in the sector of Small Scale Industries. The administrative set up in dealing with Industries is divided into 12 zones largely coterminous with municipal zones in the city.

19.2 The following awards are to be instituted :

- (i) Top award carrying a prize money of Rs. 15,000/- (One)
- (ii) Second awards carrying a prize money of Rs. 10,000/- (One)
- (iii) Third award carrying a prize money of Rs. 7,500/- (One)
- (iv) A special recognition award may be given in each zone carrying a prize money of Rs. 5000/-. In addition to this cash prize, a shield and a certificate will be given.

19.3 An outlay of Rs. 10.00 lacs is approved for the 8th Plan 1992-97 and Rs. 2.00 lacs for the year 1992-93.

20. Industrial Work Centres (Rs. 10.00 lacs)

20.1 The Industrial Work Centres are to be allotted to weaker sections of society. The slum wing, DDA had asked for payment to the tune of Rs. 1195.66 lacs for the 2919 centres, of which a sum of Rs. 1226.23 lacs has already been released by the Delhi Admn. including the amount provided to them from Special Central Assistance of Spl. Component Plan.

20.2 Applications for allotment of work centres have been invited in phases. In June, 1985 applications in respect of work Centres at Nangloi, Mangolpuri, Madipur and Khichripur were invited. In Feb., 1987 applications were invited for left over work centres and also newly constructed work centres at Nangloi. The Executive Council in 1988 decided that the scheme should be administered by the Industries Deptt. The Deptt. invited applications so as to reach them by 5th June, 1990 in respect of work Centre located in Mangol Puri (E-Block), Sultanpuri and Khichri Pur. Further, applications in respect of work Centre located at Kalyanpuri, Himmatpuri and Jawala Puri were also invited for which the last prescribed date for receipt of applications was 17th Sept., 1990.

20.3 Applications invited in June, 1985, Feb., 1987 and June, 1990 were scrutinised by committees. The eligible applicants have been allotted industrial work centres by draw of lots in May, 1991-92. 992 Industrial Work Centre were allotted during the above draw. The cost of work centre is required to be recovered under hire purchase system as per decision of the Executive Council over a period of 17 years. The base price is to be charged @ Rs. 145 per sq. ft. of the plinth area. 25% of the cost will be initially recovered in lump-sum before possession is handed over. Thereafter the allottees will be allowed moratorium period of 2 years during which only interest on balance hire purchase price will be recovered. The balance hire purchase price will be recovered in monthly instalments spread over 15 years.

20.4 With the process of allotment having been set in motion, the department submitted a proposal for creation of additional posts. The Lt. Governor, however directed that instead of creating additional posts, the possibility of getting some staff on deputation from DSIDC might be explored and in case this was not possible the transfer of the scheme itself to DSIDC might be examined. The matter was discussed with the Chairman, DSIDC who expressed willingness to take over of the scheme. Finally the proposal was discussed in detail in a meeting taken by the Chief Secretary on 12-6-91. It was decided that the scheme and the industrial work centres should be transferred on "As is Where is Basis" to DSIDC. The Lt. Governor has also concurred with the decision. Following this decision the concerned records pertaining to allotments already decided, and those in the pipe-line, have been handed over to DSIDC.

20.5 A token provision of Rs. 10 lacs has been made for eighth plan which includes Rs. 2 lacs for A. P. 92-93 to meet the past liabilities which may emerge on settlement of accounts between DSIDC and Slum Wing.

21. *Subsidy to SSI for Installation of Power Generating Sets (Rs. 5.00 lacs)*

Like other States, it is proposed to provide subsidy to the small scale industrial units who have to work round the clock or high-tech. industrial units for purchase of generating sets to the extent of 25% of the cost of the set or Rs. 50000/- per set, whichever is less. The scheme is yet to be finally cleared by Delhi Admn. and accordingly a token provision of Rs. 5 lacs is made for eighth plan and Rs. 0.50 lac for Annual Plan 1992-93.

II. INDUSTRIAL ESTATES :

1. *Seven Flatted Factories at Rani Jhansi Road (Rs. 50.00 lacs)*

1.1. The Flatted Factories Complex consist of 7 blocks having 571 flatted factories. Out of these, two blocks, ('F & G') have been allotted to Mines & Metal Trading Corporation for further allotment to 100% export oriented gem and jewellery entrepreneurs. In addition, 370 flats in Blocks 'A' to 'E' were offered for allotment to other entrepreneurs in 1986-87 and allotment was made as per the policy.

1.2. A lift for the workers/allottees of 'E' block, delinked from 'F' & 'G' blocks is under construction. The work relating to improvement of the complex and maintenance work till such time as these flatted factories are transferred to the allottees are to be borne by the Department. In addition, civic services of the complex are also proposed to be transferred to the MCD for which the Department might be required to pay some deficiency charges to MCD from plan funds. An amount of Rs. 50.00 lacs is approved in the 8th Plan period and Rs. 25.00 lacs for 1992-93.

2. *Badli Industrial Estate (Rs. 260.40 lacs)*

2.1. On the basis of recommendations contained in the 58th report of the Estimates Committee, the Badli Industrial Estate was set up on land measuring 76 acres by the Industries Department in 1961 in Badli Villages with a view to provide alternate avenues of employment to the rural population. So far 60 acres of land have been developed in two phases. 154 plots and 7 sheds were developed in Phase-I and 121 plots in Phase-II. These plots have since been allotted to entrepreneurs.

2.2 The remaining 16 acres of the land was kept for labour housing but due to the dis-continuance of the subsidised Industrial Housing Scheme, this project could not be initiated and it was decided to develop this land for industrial use. For the development of this area (Phase-III) an amount of Rs. 60 lacs was paid to DSIDC in 1984-85. DSIDC has now completed the development and has carved out 47 plots. Action is being initiated for the allotment/utilisation of these plots. Provision accordingly, has been made in the 8th Five Year Plan for the payment of the deficiency charges to MCD in respect of the civic services of Phase-III as well as for the allotment of the Plots.

2.3 There is no facility for the final disposal of the sewerage from the Badli Industrial Estate. D.W.S. & S.D.U. has prepared a scheme for construction of a large sewerage pumping station in Sector-XIX of Rohini for onward pumping of the sewerage to the Rithala Sewerage Treatment Plant. The sewage of the Estate would be pumped to the proposed Sewerage Pumping Station to be constructed in Rohini for final treatment in the Rithala Treatment Plant. The cost of the project has to be shared on prorata sewerage discharge basis. Land for the effluent treatment plant has been encroached by the jhuggies. Plot No. M-10 (Phase-I) and park site of Phase-II has also been encroached by Jhuggi Jhopri dwellers and it is proposed to remove them through the Slum Wing after making payment @Rs. 10,000/- per Jhuggi. There is no boundary wall on the rear side of Phase-I and therefore provisions for the same have been kept. The Badli Industrial Estate is an encroachment prone area due to the existence of a large cluster of jhuggies and unauthorised colonies in the vicinity. A proposal has therefore been made herein for creation of four posts of Chowkidars to safeguard the Estate from encroachment by JJ dwellers and others and also one post of Mali for maintenance of the garden in the Administrative Block.

2.4 The following works would be carried out in the Badli Industrial Estate during the 8th Five Year Plan at the cost indicated against each :—

	<i>(Rs. in lacs)</i>
(i) Removal of Jhuggi from Plot No. M-10 and Park site.	60.00
(ii) Payment of deficiency charges to MCD in respect of civic services of Phase-III.	60.00
(iii) Payment of deficiency charges to D.W.S. & S.D.U., MCD towards the overhead water storage tank.	10.00
(iv) Construction of Boundary Wall in the back-side of Phase-I.	20.00
(v) Setting up industrial effluent treatment plant and removal of jhuggies from the site.	60.00
(vi) Improvement of the Administrative Block-Raising the ground level and raising the height of boundary wall from 2½ ft. to 6 ft.).	5.00

(vii) Payment of D.W.S. & S.D.U. for Pumping industrial waste water from B.I.E. to Sewerage Pumping Station proposed to be constructed by them in Sector-XIX of Rohini for onward pumping to Rithala Sewerage Treatment Plant (on pro-rata discharge basis).	24.20
(viii) Construction of accommodation for the fire fighting staff.	10.00
Total :	<u>249.20</u>

Apart from the above mentioned amount which would be under the capital head an amount of Rs. 11.20 lacs would be required under Revenue Head on account of the following —

	<i>(Rs in lacs)</i>
(i) Allotment of the plots developed in Phase-III expenditure on account of advertisement publicity and other misc. charges.	5.00
(ii) Creation of four posts of Chowkidars and one post of Mali for Admn. Block.	5.00
(iii) Driver's Salary.	1.20
Total :	<u>11.20</u>

The following works are proposed to be carried in 1992-93. The break up is as under :—

	<i>(Rs. in lacs)</i>
	Capital
(i) Removal of Jhuggies from Plot No. M-10	10.00
(ii) Construction of boundary wall.	5.00
(iii) Payment of deficiency charges to DWS & SDU towards the overhead water storage tank.	10.00
(iv) Payment to DWS & SDU for pumping indl. waste water from Badli Industrial Estate into large sewerage pumping station proposed to be constructed by them in Sector-XIX of Rohini.	24.20
(v) Improvement of Administrative Block by raising the ground level and also raising the boundary wall from 2½ fts. to 6 fts.	5.00
Total :	<u>54.20</u>

Apart from the above amount which would be under the capital head an amount to Rs. 6.25 lacs under Revenue Head would also be required for the following :—

	(Rs. in lacs)
(i) Allotment of plots of phase-III expenditure on account of advertisement publicity and other misc. charges.	5.00
(ii) Creation of four posts of Chowkidars and one post of Mali,	1.00
(iii) Driver's Salary.	0.25
Total :	6.25

2.5 A sum of Rs. 260.40 lacs is approved for the 8th Five Year Plan (1992-97) and Rs. 60.45 lacs for Annual Plan 92-93.

3. *Functional Industrial Estate for Electronics, Okhla (Rs. 100.00 lacs)*

The Department of Industries acquired a piece of land measuring about 12.5 acres for the Functional Industrial Estate for Electronics, Okhla Industrial Area Phase-II. This land was developed into 101 industrial plots. Allotments in respect of these plots have already been made by the Deptt. The Department would be required to make payment towards deficiency charges for civic services provided by MCD. The formalities relating to handing over of services would be completed during 1992-93. Therefore, an amount of Rs. 100.00 lacs is approved in the 8th Five Year Plan and Rs. 30.00 lacs for 1992-93.

4. *Improvement of Industrial Sheds constructed by DSIDC (Rs. 50.00 lacs)*

In the 7th Five Year Plan, 1985-90, there was no approved outlay under the scheme 'Improvement of Industrial Sheds constructed by DSIDC'. However, Rs. 0.97 lac was spent on the scheme in 1987-88. In addition, an amount of Rs. 27.83 lacs was released to DSIDC as grant-in-aid for electrification of six community work centres. The scheme is meant for the improvement of 838 industrial sheds spread over different areas in Delhi. It has been decided to transfer these sheds to the allottee entrepreneurs on hire purchase basis. Since the terms of hire purchase were not acceptable to the allottees, the Executive Council, in its meeting held on 9-3-89 has given further concessions to make the scheme of hire-purchase a success. It has included a provision for deficiency charges for transferring civic services. The DSIDC has already taken up the matter with the MCD and estimates of deficiency charges have been received from MCD. The requirement of funds is estimated to be about Rs. 350.00 lacs. An amount of Rs. 35.00 lacs was released to DSIDC in 1990-91 for payment to MCD towards deficiency charges where as Rs. 280.74 lacs was released during 1991-92. Funds are also proposed to be kept during the 8th plan period to meet contingent expenses. An amount of Rs. 50.00 lacs is approved for the 8th plan period and Rs. 5.00 lacs for Annual Plan 1992-93.

5. *Construction of Industrial Sheds by DSIDC (Rs. 5.00 lacs)*

5.1 The scheme envisages the construction of 400 industrial sheds by DSIDC on self-financing basis at Kirti Nagar, Jhilmil, Tahirpur and Mangolpuri. The area of each shed would be 300 sq. mt. and the total cost had been estimated to be Rs. 3000 lacs. Industries Department is to finance 10% of the cost. As such in the 7th Five Year Plan, Industries Deptt. has released Rs. 195 lacs to DSIDC.

5.2 The DSIDC has so far constructed 104 sheds at Nangloi Industrial Complex under this scheme and 300 sheds are proposed to be constructed on the land to be acquired from DDA at Kirti Nagar, Jhilmil Tahirpur and Mangolpuri @Rs. 3.50 lacs per acre.

5.3 As DDA increased the price of land allotted/to be allotted to DSIDC, the scheme could not progress further. The matter regarding settlement of the rates was taken up with the Ministry of Urban Development, Govt. of India. The Ministry of Urban Development has turned down the DSIDC request to charge institutional rates of land for the construction of industrial sheds in Mangolpuri on self financing basis. The position has therefore, become difficult. As such the cost of land will have to be paid at much higher rates. Consequently the total cost of the projects would come to Rs. 10,450 lacs instead of the original estimate of Rs. 3000 lacs. Delhi Administration's share will therefore be Rs. 1045 lacs instead of Rs. 300 lacs. Rs. 195 lacs has already been paid. However, it may not be possible for Delhi Administration to maintain 10% contribution if the land cost is at commercial rates. In view of this only a token provision of Rs. 5.00 lacs for the 8th Plan and Rs. 1.00 lac for 1992-93 has been provided till a final settlement is made.

6. *Improvement of Okhla Industrial Estate (Rs. 35.00 lacs)*

Industries Department had developed two more phases by the end of 1988-89. The fourth and final phase has also been developed. This phase consist of 30 industrial plots. The work relating to installation of electric sub-station, completion of boundary wall of the Okhla Industrial Estate, improvement in fire fighting arrangements and maintenance work of office complex etc. are to be undertaken in the 8th plan period. Though estimates in respect of these works are yet to be prepared by the PWD Department an amount of Rs. 35.00 lacs is approved for the 8th Plan and Rs. 10.00 lacs for 1992-93.

7. *Six Flatted Factories for Group Industries, Okhla (Rs. 75.00 lacs)*

The Flatted Factories Complex, Okhla was purchased from DDA on payment of Rs. 200 lacs prior to the commencement of 7th Five Year Plan. The Delhi Administration had decided to dispose of these flats on hire-purchase basis for which necessary approval was obtained from the Govt. of India. The Executive Council had also taken a decision to transfer these sheds on hire purchase basis to the allottees. However, allottees did not accept the cost price and matter is sub-judice now. Maintenance, will have to be done by the Department. In addition, civic services in respect of this complex are also to be transferred to MCD during the 8th plan period for which some deficiency charges will have to be paid to MCD by the Department. Therefore, an amount of Rs. 75.00 lacs is approved for the 8th Plan and Rs. 25.00 lacs for 1992-93.

8. *Functional Industrial Estates at Patparganj (Rs. 210.00 lacs)*

8.1 160 acres of land was acquired from DDA for a sum of about Rs. 1.60 crores. 30 acres have since been surrendered to DDA. On the remaining 130 acres, seven functional Industrial Estates, have been set up viz. :—

- (i) Food Processing, Drugs and Pharmaceuticals.
- (ii) Electronics and Telecommunications.

- (iii) Readymade and Fashion Garments
- (iv) Electrical Goods
- (v) Auto Parts
- (vi) Plastic, Polymer and Packaging Industries, and
- (vii) Light Engineering Industries.

8.2 500 plots were offered for allotment by open advertisement in March, 1988. The draw of lots was held in January, 1990, whereafter offers of allotment to all 500 allottees were sent. They were directed to deposit 50% of the premium initially. The rate of premium was decided by the Executive Council as Rs. 500/- per sq. mt. 498 allottees have deposited the 1st instalment of premium. Since then 2nd instalment of premium consisting of balance 50% has also become due. The 2nd instalment has been deposited by as many as 440 allottees. Those who have deposited full premium have been asked to execute perpetual lease and take over possession of the allotted plot.

8.3 Sewage network, and water supply system have been laid and roads have been constructed. Construction of storm water drains is to start shortly. In addition the Fire Department has asked for provision of additional fire fighting facilities in the shape of static tanks and water hydrants, at locations specified by them. Further, water supply is proposed to be augmented by sinking 3 more tube-wells. For disposal of sewage, construction of 2 sump wells and pumps are also planned. In addition to the above infrastructure it is also proposed to construct 70 kiosks so as to provide shopping facilities for the workers. 8 toilet blocks are also proposed for construction for the use of workers or for the persons visiting the Estate.

8.4 A sum of Rs. 4,38,98,302/- has been released for electric supply. DESU plans to construct one 66 KVA Grid and 25 sub-stations and for this purpose land has been handed over to DESU. Construction of 13 sub-stations and part construction of grid station of 66 KVA has been done. Part of the equipment has also been installed at the Grid Station.

8.5 The Estate would also need other facilities such as common rooms for recreation, conference hall, restaurant and other services like postal, telephone, telegraph, bank etc. Further space would also be required for the office of the Estate Manager and his staff. To meet these needs 1.56 hectares has been set apart under the head "Common facilities".

8.6 A sum of Rs. 210.00 lacs is approved for the scheme for the 8th Plan. This includes Rs. 52 lacs for 92-93.

9. Flatted Factories for leather goods, Wazirpur (Rs. 20.00 lacs)

The Department has set up a Flatted Factories Complex exclusively for leather goods at Wazirpur Industrial Area, wherein, besides an administrative block there are 127 work places of varying dimensions. These work places have been allotted by

the Department on lease to the leather artisans, who mostly belong to weaker sections of the Society. The Department has provided the following infrastructural facilities which will be strengthened during eighth plan:—

(i) Common Facility Centre Wazirpur

The leather artisans at Wazirpur can not afford to purchase costly, imported and power operated machines with their limited means. The Department has therefore set up a Common Facility Centre at Wazirpur. About 22 costly power operated machines have been installed there. The Common Facility Centre became operational in 1982-83 and has been rendering useful service to the entrepreneurs of the Flatted Factories Complex as well as outsiders. More leather machines/spare parts are likely to be purchased and installed at this Centre during the 8th Five Year Plan.

(ii) Designing and Training in Footwear and Leather Goods Mfg.

In order to provide skilled labour to the leather industry which has also become export oriented, the Deptt. has set up a Training Centre at Wazirpur. This scheme provides for imparting training to 20 candidates for a period of six months in designing and manufacture of footwear and leather goods. The trainees are paid stipend at the rate of Rs. 150/- per month. The raw material, machines and other tools are provided by the Department to the trainees during the training period.

(iii) Construction of Show Room & Sales Counter at Flatted Factories for Leather Goods, Wazirpur

In order to provide adequate marketing facilities to the leather artisans of Wazirpur, the Department has decided to construct a show room and sales counter at Wazirpur. The show room has since been completed. A sum of Rs. 20.00 lacs is approved for the 8th Five Year Plan which includes Rs. 4 lacs for A.P. 1992-93.

III. Khadi & Village Industries

(i) Grant-in-aid to Delhi Khadi & Village Industries Board (Rs. 225.00 lacs)

The Himachal Pradesh Khadi & Village Industry Board Act, 1966 was extended to the National Capital Territory of Delhi on 1st May, 1983.

Delhi KVI Board implements the following schemes :—

- (i) Village Industries under KVIC Schemes
- (ii) Block Loan Schemes
- (iii) Incentive for Khadi Productions :—

Following functions are being performed by the KVI Board :—

- (a) Disbursements of loans and grant in accordance with approved financial pattern of the KVIC/Block loan scheme.
- (b) Spot verifications to check the proper utilisation of financial assistance given to the beneficiaries.
- (c) Effecting recoveries from the beneficiaries and repayment to KVIC.
- (d) Undertaking motivational measures for propaganda and publicity by way of holding exhibitions, radio, T.V. programmes, symposium, seminars and use of other media means.
- (e) Monitoring, evaluation and planning of the schemes in accordance with the guidelines of KVIC and Delhi Admn.
- (f) Arranging the supply of equipment, tools and machinery for adoption of new technology being introduced by KVIC from time to time.

- (g) Arranging training programmes for improving technical skills of the loanee of the Board in various schemes.
- (h) Making arrangement or assist for the marketing of the products of various Village Industries by way of opening the sale outlets or reference to KVIC outlets.

In order to implement KVI programmes, the Board has been receiving financial assistance from two sources.

- (i) Delhi Admn., provides 100% grants-in-aid to meet the administrative expenditure of the Board and loan for Block Loan Schemes.
- (ii) Khadi & Village Industries Commissioner (KVIC) Bombay provides financial assistance entirely for disbursement of loans and grants among the various beneficiaries in accordance with its schemes.

1. KVI Schemes

By the end of 7th Plan, the Board had financed only 5277 units. During 8th Plan, it is expected that the total number of units to be financed by the Board under KVI Scheme may be 8000 units. KVIC Bombay meets the entire financial commitment for its scheme.

Year-wise physical targets of 8th plan is given below :—

8th Plan

	Units	SC/ST
(i) 1992-93	1200	300
(ii) 1993-94	1400	325
(iii) 1994-95	1600	350
(iv) 1995-96	1800	375
(v) 1996-97	2000	400
Total :	8000	1750

The above targets are, however, subject to the approval of KVIC, Bombay.

Organisational Structure

With a view to cater to the growing responsibility of the board for the KVIC and Block Loan Schemes, it needs to be suitably strengthened by well trained staff. For its day-to-day functioning, the Board is having a senior IAS Officer as its Managing Director and one Dy. Director. Another post of Dy. Director is vacant.

Because of a wide gap in official hierarchy, it is proposed to create the following three posts only :

S. No.	Designation	Nó. of Post	Pay Scales (Rs.)
1.	Jt. Director (Schemes)	1	3000-4500
2.	Sr. Steno (English)	1	1400-2300
3.	Development Officer (Statistical)	1	1640-2900
		3	

2. Office Accommodation

At present, the office of the Board is situated in a rented building at ISBT Complex. Board has been paying annual rent of Rs. 4.00 lacs since couple of years, which may increase in times to come.

In the interest of the organisation it appears to be essential that the Board may have its permanent office complex.

3. Incentive on Khadi Production

The Board has been providing grant to the direct listed institutions of Khadi & Village Industries Commission engaged in the production of Khadi. For this purpose the Delhi Khadi & Village Industries Board will maintain separate account.

Year	(Rs. in lacs)				Total
	Grant-in-aid for establishment expdr.	Incentives on Khadi production	Khadi Gramodyog complex office Building		
1992-93	37.75	3.00	—		40.75

A sum of Rs. 225.00 lacs is approved for the 8th five year plan which includes Rs. 40.75 lacs for 1992-93.

Block Loan Scheme (Rs. 50.00 lacs)

1. Block Loan Scheme was previously being implemented by the Department of Industries, for advancing loans to Small Scale Industrial Units.

2. In pursuance of a decision taken by the Delhi Admn. implementation of this scheme was transferred to Delhi Khadi & Village Industries Board from 1-4-90. The rate of interest of the loans being advanced under the scheme is charged as prescribed by Govt. of India from time to time.

3. For implementation of this scheme in the 8th five year plan a provision of Rs. 50.00 lacs is approved which includes Rs. 15 lacs for Annual Plan 1992-93.

IV. Handloom Industries

1. *Construction of Weavers' Work-Sheds-cum-Residential Accommodation at Nand Nagri Resettlement Colony (Rs. 5.00 lacs)*

About 4.3 acres of land has been acquired near Nand Nagri from DDA to construct weavers' work sheds-cum-residential accommodation. The scheme will give direct employment to about 500 workers and indirect employment to an equal number of persons. As per the estimates, the total cost of the project is Rs. 235.54 lacs with common facilities like 30 small dye houses, exhibition-cum-showrooms and administrative block etc. in the said complex.

1.2 So far, an amount of Rs. 210.00 lacs has already been released to DSIDC as deposit work for completing the construction work. The work is almost nearing completion. Allotment policy is being framed and further it has been proposed to construct a common waste water treatment plant to process the effluent dye solutions being discharged on account of dyeing at this complex, as an environmental pollution control measure. The DSIDC has already been requested to undertake construction of 8 dye houses and the waste water treatment plant in the complex and complete the same at the earliest. For completing all these balance works a sum of Rs. 5.00 lacs is approved for the 8th Five Year Plan period and Rs. 1.00 lac for the Annual Plan 1992-93.

2. *Rebate on the Sale of Handloom Cloth (Rs. 125.00 lacs)*

2.1 With a view to increase the sale of handloom cloth, rebate is allowed to consumers through recognised emporia. Special rebate at the rate of 20% is allowed in National Level Handloom Expos/Exhibitions being organised by the Development Commissioner for Handlooms, Govt. of India, at various metropolitan cities, normally for a duration of one month in each expo. Most societies are eligible to avail of the above rebate facilities through their respective Federation/Apex societies/DSIDC. 816 Weavers' Cooperative Societies registered by the Registrar of Cooperative Societies will be benefitted by this scheme and the incidence of rebate will increase every year.

2.2 The incidence and expenditure on the rebate scheme will be met from outlays for this scheme. A sum of Rs. 125.00 lacs is approved for the 8th Five Year Plan which includes Rs. 25 lacs for the Annual Plan 1992-93.

3. *Weaver's Colony at Bharat Nagar (Rs. 10.50 lacs)*

3.1 This colony was set up by the Department of Industries in 1976 on an area of 4.84 acres of land at Bharat Nagar, Delhi. Work-sheds were allotted to 21 selected Cooperative Societies and 8 worksheds to the Govt. of India, for running the Weavers' Service Centre for the benefit of handloom weavers.

3.2 There was a proposal to construct 22 dye houses, one canteen-cum-cycle stand and garrage. Construction of 14 dye houses has reached upto roof level and the remaining 8 dye houses are yet to be constructed, for which PWD authorities have already been requested to expedite the work.

3.3 Further, to provide for safety and security measures the Fire Deptt. surveyed the complex and submitted their report. The said report of Fire Deptt. has been sent to PWD authorities to make the necessary provision as per report for fire safety measures. An outlay of Rs. 10.50 lacs for the 8th Five Year Plan and Rs 2.20 lacs in the Annual Plan 1992-93 is approved.

4. Promotion of Handlooms (Rs. 5.00 lacs)

For promotion of handlooms the following programmes are to be implemented during eighth plan :—

(i) Design Cell for Handloom Cloth

The Industries Department has set up a Design Cell for Handloom Cloth at Weaver's Colony at Nand Nagri for the benefit of Handloom Weavers with technically qualified and experienced personnel, viz ; one Designer (H & H), one Master Craftsman and one Dyer-cum-Printer.

In this cell, design patterns are transformed from paper/graph paper to fabric stage. This involves various stages, processes and raw materials, equipment and some skilled labour to carry out these functions. For this purpose it is proposed to appoint 3-4 skilled labourers, purchase modernised looms with other related accessories and require raw material etc. For popularising the use of these modern looms and the use of polyester and its blended yarn on these looms, it is proposed to organise demonstration-cum-training programmes for Handloom Weavers.

(ii) Strengthening of Handlooms, Powerlooms and Handicrafts Section

Work in the Handloom & Textile Section has increased considerably. Handlooms and Handicrafts are priority sectors and the Govt. of India have been attaching great importance to these industries. In other States there are separate Directorates for Handloom as well as for Handicrafts.

Industries Deptt. has been assigned the additional responsibility of enforcement of Handloom (Reservation of Articles of Production) Order, 1985 and Textiles (Control) Order, 1986. In addition to the above, the Deptt. is already implementing many plan schemes relating to handloom and handicrafts.

It is therefore, considered essential to create the following posts :—

S. No.	Name of the Post	No. of Posts	Pay Scale
1.	Technical Development Officer (Handloom & Handicrafts)	2	Rs. 1640-2900
2.	J.A.O.	1	Rs. 1640-2900
3.	Stenographer	1	Rs. 1200-2040
4.	Handicrafts Promotion Officer	1	Rs. 1400-2300
5.	L. D. C.	1	Rs. 950-1500
6.	Messenger	2	Rs. 750-940

(iii) Handloom Export Production Projects

There are about 10,000 handlooms installed in the National Capital Territory of Delhi, 50% of these handlooms are in the cooperative field. There are about 816 handloom weavers cooperative societies in Delhi. There are ample opportunities for this sector to develop in the field of exports.

It is proposed to set up an Export Production Project in Bharat Nagar with the Weavers' Colony. The sub-projects at Weavers' Colony, Nand Nagri will cover an aggregate of 500 handlooms in the adjoining areas in a phased manner over a period of three to five years. This scheme/project will aim at a comprehensive programme covering the following :—

- (a) A comprehensive training programme for selected handloom weavers in quality weaving, design development and manufacture of quality fabrics free from defects ;
- (b) Establishment of Raw Material Bank ;
- (c) Provision of High Level Technical Services and Designs ;
- (d) Establishment of proloom, postloom facilities ;
- (e) Establishment of common production unit for manufacture of samples ;
- (f) Marketing of production subject to quality control ;
- (g) Establishment of warehouse facilities ;
- (h) Arranging finance ; and
- (i) Establishment of Model Show Rooms-cum-Marketing outlets.

This is a central plan scheme which will be implemented on commercial lines. Central assistance will be limited to the first five years. The pattern of central assistance towards the projects is 75% loan and 25% grant.

Since the proposed Handloom and Handicrafts Development Corporation is yet to come up in Delhi, it is proposed to run this Handloom Export Production Project through DSIDC for which a reference has already been made to DSIDC.

(iv) Assistance for upgrading Technology of Handloom Industry

It is a regular feature to sponsor candidates every year around June-July for admission into the 3 years Diploma Course in Handloom Technology, being conducted by the Indian Institute of Handloom Technology, Varanasi, Stipend at the following rates is being paid to each of the students for the duration of the course and no tuition fee is charged by the Institute.

Class	Rate of stipend per month per trainee
1st year student	Rs. 200/-
2nd year student	Rs. 225/-
3rd year student	Rs. 250/-

As per the policy of the Govt. of India, the entire expenditure of stipend of one seat is borne by the Instt./Govt. of India, one of the remaining two seats 50% of the expenditure of stipend is borne by the Institute/Govt. of India and the balance 50% of the expenditure of stipend will have to be borne by the sponsoring State Govt. It is proposed to give additional State stipend of Rs. 200/- per month per trainee to all the States sponsored students of 1st, 2nd and 3rd year classes and educational study tour allowance of Rs. 500/- for all the 2nd and 3rd year class students as per pattern approved by the Govt. of India.

(v) Interest subsidy on Loan Granted by RBI/NABARD

Under the scheme, the Delhi State Cooperative Bank Ltd. can advance loan for working capital to handloom cooperative societies at subsidized rates of interest. The Cooperative Bank can get refinance facility from NABARD. The subsidy on interest will be reimbursed to the Coop. Bank by the State Govts. Due to procedural difficulties the scheme could not be implemented. The Department is making efforts to sort out such difficulties with NABARD and the Cooperative Bank.

A sum of Rs. 5.00 lacs is approved in the 8th Five Year Plan 1992-97 and Rs. 1.00 lac for the Annual Plan 1992-93.

5. Grant-cum-Loan for Modernisation of Handlooms (Rs. 15.00 lacs)

This scheme aims at technological improvement of the handloom industry by way of advancing loan and grants to subsidise the cost of equipment and tools being purchased by the Handloom Weavers Cooperative Societies. As per the pattern approved by the Govt. of India, the assistance is in the form of 1/3rd grant-in-aid and 2/3rd loan. 19 Handloom Cooperative Societies consisting of 300 handloom weavers members were benefited during 1990-91 out of which 273 belong to the Scheduled Caste as against the target of 400 weavers. It is proposed to assist about 200 SC weaver members of the cooperative Societies during 1992-93. A sum of Rs. 15.00 lacs (Rs. 10.00 lacs loan and Rs. 5.00 lacs grants) is approved for the 8th Five Year Plan period and Rs. 1.50 lacs (Rs. 1.00 lac loan and Rs. 0.50 lac grants) in the Annual Plan 1992-93.

6. Handloom Development at Nand Nagri (Rs. 5.00 lacs)

(Construction of Additional Block of Weavers Work-sheds and dye houses) :

The Industries Department has set up a Weavers Colony at Nand Nagri resettlement Colony on a piece of land measuring 6,318 sq. metres at an estimated cost of about Rs. 20.00 lacs. Six large weavers work-sheds have been constructed and allotted to selected Handloom Weavers' Cooperative Societies on economic rent. There was a provision in the site plan for construction of two more work-sheds in the same complex with 8 small dye houses for the benefit of allottees. The work-sheds have already been constructed and allotted and construction of 8 dye houses is yet to be taken by PWD authorities for which they have been requested to expedite the work. PWD authorities have also been requested to provide necessary fire fighting equipments as a fire safety measure in the said complex. One post of Estate Manager (Rs. 1640-2900), one post of U. D. C. (Rs. 1200-2040) and three posts of sweeper-cum-chowkidar (Rs. 750-940) were created during 7th five year plan and they are being transferred to Non-Plan from 8th five year plan as it is a committed expenditure. A sum of Rs. 5.00 lacs (Rs. 3.00 lacs Revenue & Rs. 2.00 lacs Capital) is approved for 8th Plan 1992-97 and Rs. 1.00 lac for Annual Plan (Rs. 0.50 lac revenue and Rs. 0.50 lac capital) 1992-93.

7. Handloom Weavers Welfare Scheme (Rs. 5.00 lacs)

7.1 At present there are 816 Handloom Weaver Cooperative Societies registered in National Capital Territory of Delhi out of which 446 cooperative societies are functioning with 7893 handloom weaver workers enrolled as members.

(i) Group Insurance Scheme

Under this scheme, all the working members of the Handloom Cooperative Societies who are not less than 18 years and not more than 60 years old on the entry date and who are earning their livelihood by their own work are eligible to be admitted as insured members provided their health and physical conditions permit them to work. The concerned cooperative society will act for and on behalf of the insured members in all matters related to this scheme.

Each weaver/worker member of the Cooperative Societies who fulfils the required conditions is proposed to be insured for a sum of Rs. 5,000/- renewed annually. The rate of premium for each insured member will be Rs. 22.50 towards the premium as 50% contribution from his/her side out of his/her wages. A matching contribution of 50% share i.e. will be paid by the Industries Department making a total of contribution of Rs. 45/- as annual premium towards the policy of Rs. 5000/- for each insured member under this scheme.

(ii) Thrift fund-cum-saving security scheme

As per the pattern of this scheme, it will be compulsory for all the working Handloom Weaver Coop. Societies to contribute 6 paise per rupee of wages paid to the worker/weaver members. The Department will contribute an amount of half the sum contributed by the weaver/worker member of the cooperative society i.e. 3 paise per rupee of wages as Govt. contribution taking into account Rs. 300/- as on average monthly wages per weaver as the maximum for the purpose of this scheme.

7.2 The Govt. of India is also contributing at the rate of 3 paise per rupee of wages earned by the weaver/worker member of the cooperative society with a maximum ceiling limit of Rs. 90/- per annum per weaver/worker member as Central Govt.'s matching contribution under the scheme. Under these two weaver's welfare programmes, i.e. Thrift Fund-cum-Saving Security Scheme and Group Insurance Scheme a total number of 534 weaver member were enrolled upto 31-3-91. A provision of Rs. 5.00 lacs is approved in the 8th Five Year Plan and Rs. 1.00 lac in the Annual Plan 1992-93 for this scheme.

V. HANDICRAFTS

1. Promotion of Handicrafts (Rs. 40.00 lacs)

As per the pattern of the training scheme approved by the Govt. of India, the Mastercraftsmen are paid wages and trainees are paid stipend at the following prescribed rates :—

(i) Mastercraftsman's wages	Rs. 1500/- per month
(ii) Trainee's stipend	Rs. 250/- per month

In addition, the Mastercraftsmen are being paid rent for training premises, electricity, water charges, wastages of raw material etc. during the training period. At present there are 12 training schemes in operation under different Mastercraftsmen in the trades of metal engraving, meenakari, bone and sandal wood carving, artificial jewellery, clay modelling, wire jewellery etc. Besides the above training scheme, it is proposed to increase the number of training programmes to train more and more raw hands with a view to preserve traditional art and crafts.

1.2 Apart from the above, a paper craft and papier machie course is run by Industries Deptt, which is exclusively meant for girls. Training in this centre is being imparted in paper craft and papic machie clay medelling designing and drawing etc. There are 50 trainees under training at present. These trainees are being paid Rs. 250/- per month as stipend.

1.3 As per requirements of the Board of Technical Education a proposal is under active consideration to create the following posts :—

		Rs.
(i) Junior Lecturer	1	1400-2300
(ii) Technician	1	1200-2040
(iii) Librarian	1	1400-2300
(iv) Peon	1	750-940
(v) Sweeper	1	750-940

1.4 The All India Handicrafts Board and Delhi Admn. had approved a scheme for running a Carpet Weaving Training Centre. The centre has started carpet weaving training at Bharat Nagar. Each trainee of this carpet training centre is being paid Rs. 250/- per month as stipend. It is under consideration of this Deptt. to upgrade the training course as 'Diploma' in Carpet and Duree Technology by extending the term of the training to two year diploma in Carpet & Duree Technology Course. The following bare minimum staff of technical and ministerial nature is proposed :—

		Rs.
(i) Textile Designer	One	1640-2900
(ii) Instructor (Weaving)	One	1400-2300
(iii) U.D.C.	One	1200-2040
(iv) Instructor (Textile & Processing)	One	1400-2300
(v) Peon	One	750-940

1.5 In the current financial year the Govt. of India has accorded approval for revision of the State Award amount as per details given below :—

Category of Prizes	No. of Awards	Rate of Award
(a) State Award	3	Rs. 5000/-
(b) State Merit Award	5	Rs. 1000/-
(c) Consolation Prize	5	Rs. 200/-

These awards are given every year to the selected craftsmen in a function being organised by Industries Department.

Provision has been made for rebate on sale of handicrafts items through the recognised Emporia, during the All India Handicrafts week being celebrated every year in the month of Dec. as per the directions of the Govt. of India.

1.6 The Development Commissioner (Handicrafts) Govt. of India, has advised the State Government to undertake the census of handicraft industry in N. C. T. of Delhi, with a view to have current data on various aspects related to handicraft industry in Delhi for formulating any new schemes/programmes/proposals for promotion and development of handicrafts industry and to preserve the traditional heritage of handicrafts. Necessary provision has also been made under this scheme to undertake the survey/census of handicrafts in N.C.T. of Delhi by appointing the requisite number of enumerators, supervisors, compilers etc. as per the requirement of the task.

1.7 To meet the expenditure on all the above activities/programme an outlay of Rs. 40.00 lac s is approved for the 8th Five Year Plan and Rs. 8.00 lacs for the Annual Plan 1992-93.

2. Handloom and Handicrafts Bazars in the N. C. T. of Delhi (Rs.10.00 lacs)

The Department has formulated a scheme for a Handloom and Handicrafts Bazar in Delhi with a view to popularise the handloom and handicrafts items manufactured by the handicrafts artisans and the handloom weavers of this N.C.T. of Delhi and to eliminate middlemen. These bazars are organised by this Deptt. at prominent places in Delhi throughout the year. Each bazar is being organised for a period of 5 to 15 days. A nominal entry fee @ Rs. 150/- per stall for each of the participating craftsmen/units is being charged by this deptt. However, the entire expenditure in organising bazars is being borne by the deptt. The bazars will help the craftsmen to a great extent because they will come in direct contact with customers and will know their preference. A sum of Rs. 10.00 lacs in the 8th Five Year Plan period and Rs. 2.00 lacs in Annual Plan 1992-93 is approved.

II. Medium & Large Industries

1. Share Capital of Delhi Financial Corporation (Rs. 200.00 lacs)

1.1 During the 7th Five Year Plan period the Corporation sanctioned assistance to the tune of Rs. 115 crores to 2233 units. Cumulative sanction as on 31st March, 1990 is around 193 crores benefiting 5200 units. During the financial year 1990-91, the Corporation sanctioned loans to 581 units amounting to Rs. 2511.60 lacs. The units financed by the Corporation employ over 7,500 people. Projections of sanctions for the year 1991-92 have been made at Rs. 2935 lacs to 680 units.

1.2 The Corporation is financing activities such as setting up of diagnostic centre, nursing homes, pathological laboratories, automobile service centres, computer training centres, hotels and restaurant, fast food processing units, amusement parks, convention/cultural centres, transport etc. Transport sector of the Corporation has become considerable over the last 3-4 years. While financing of tertiary sector in 1985-86 was nominal, around 50% of the total financing during 1989-90 was diverted to tertiary sector. In the coming years loaning of the Corporation in this sector is likely to increase.

1.3 As already stated above, the Corporation has been promoting only such units which make optimum use of scarce resources and do not constitute a drain on those resources. Keeping in view the growth rate achieved in the 7th Five Year Plan,

year-wise projection for sanctions and disbursement by the Corporation for the 8th Five Year Plan is as under :—

8th Five Year Plan	Sanctions	(Rs. in lacs) Disbursement
1992-93	3600	2,000
1993-94	4400	2,400
1994-95	5300	2,880
1995-96	6400	3,460
1996-97	7700	4,150
Total	27400	14,890

1.4. The Corporation has recently adopted various new Schemes :—

- (i) Mahila Udhya Nidhi Scheme introduced by IDBI for the benefit of women entrepreneur has been adopted by the Corporation. Assistance under scheme is provided for projects costing upto Rs. 10 lacs with a promotor's contribution of 10% of the project cost as minimum. The balance contribution will be given as seed capital assistance upto a maximum of 15% of the project cost at a nominal rate of the interest p.a
- (ii) A new scheme was launched for providing marketing support to small, cottage and village industries. Under this scheme, the units whose project cost is upto Rs. 25 lacs are eligible for financial assistance.
- (iii) A new scheme for providing financial assistance for development maintenance and construction of roads was introduced. All existing units, which are in operation for at least three years and have earned profits during the last two years are eligible for acquisition of capital goods/equipments required for development, repairing, maintenance and construction of roads.
- (iv) A new scheme for providing financial assistance to hostels, restaurants, small hospitals, nursing homes and tourist related projects was launched. Under this scheme financial assistance to units with project cost upto Rs. 45 lacs is available.

1.5. The ceilings in respect of the Single Window Scheme were revised upward and the scheme now covers new, tiny and SSI units, whose project cost (excluding) working capital (margin) does not exceed Rs. 10 lacs and whose total working capital requirement is upto Rs. 5.00 lacs.

1.6. Recently, the ceiling on financial assistance was raised from Rs. 60 lacs to Rs. 90 lacs in the case of companies and cooperatives, and from Rs. 30 lacs to Rs. 60 lacs in respect of proprietorship and partnership concern. Further there has been some relaxation granted by Delhi Admn. in its policy decision for medium scale units according to which units graduating to the medium sector due to natural growth are now eligible for financial assistance subject to certain conditions.

The estimated cost of the project is 4.5 crore. The tendered amount of the work is Rs. 3.64 crore and stipulated period of completion is 24 months. The work was awarded on 30-11-1990. The initial load test on piles have already been completed. Initial planning work has been completed. Piling work is in progress and is likely to be completed by December 1993.

For the 8th Five Year Plan an outlay of Rs. 300 lacs is approved including Rs. 100 lacs for the Annual Plan 1992-93.

9. *1st Ring Road Phase I, II, III, IV, V—(Rs. 1010 lacs)*

The Ring Road comprising Phase I to V starts from Ashram and goes up to G.T. Karnal Road via Safdarjung, Dhaula Kuan and Punjabi Bagh. The total length of Ring Road is about 48 Kms.

It is one of the most important arterial roads in the city.

Although, it is already a 6 lane road, proper foot paths, central verge and service roads are yet to be provided in several stretches of the road.

The volume and complexity of traffic on this road warrant that the road is periodically strengthened and all other features, amenities are maintained/upgraded so as to be always in tune with the traffic requirements including safety and convenience of pedestrians.

An outlay of Rs. 1010 lacs is approved in the 8th Five Year Plan to bring about complete development of the road and also to take up periodical strengthening/resurfacing of the carriageway as required. For the Annual Plan 1992-93 the approved outlay for the scheme is Rs. 214 lacs.

10. *Second Ring Road—Outer Ring Road No. 7, 8, 10 & 26—(Rs. 360 lacs)*

The Outer Ring Road No. 26 starts from Najafgarh Road and goes upto G.T. Karnal Road. It is about 12 Km. long and serves densely populated areas of West Delhi.

There is already an approved scheme to widen the entire road from 4 to 6 lanes and also strengthen the existing carriageway to improve its traffic carrying capacity and riding quality. The works is already in progress and is scheduled to be completed in the year 1992-93.

Apart from the widening/strengthening as already in progress, it is also proposed to complete the full development of the road during the 8th Five Year Plan by taking up the foot-path, drainage and service roads in some left over stretches, after the site is cleared of some trunk services being laid by M.C.D. along this road.

For the 8th Five Year Plan 1992-97 an outlay of Rs. 360 lacs is approved for outer Ring Road No. 7, 8, 10, & 26 including Rs. 160 lacs for the Annual Plan 1992-93.

11. *Third Ring Road (Outer to Outer Ring Road)—(Rs. 800 lacs)*

In view of the Rapid Urban Extensions of Delhi viz. Papan Kalan and Narela necessity has arisen to have another Ring Road to connect these areas. For this purpose it will be necessary to run a corridor close to Delhi-Haryana Border, so that these developments are inter-linked effectively. Initially provision has to be made for acquisition of land for this purpose. Since development of Papan Kalan and Narela is already in full swing, it will be necessary to invest substantially on the proposed ring road during 8th Five Year Plan period. The provision of Outer to Outer Ring Road will also ease traffic pressure on the existing arterial roads. For the 8th Five Year Plan an outlay of Rs. 800 lacs is approved for the Scheme Third Ring Road.

12. *Marginal Bund Road—(Rs. 300 lacs)*

The existing marginal bund road is divided in three segments viz. from ITO Chungi to G.T. Road (4.5 km.) from G.T. Road to Wazirabad Road Khajuri Khas Crossing (5.0 km.) and finally from Khajuri Khas to Loni Border (8.0 km.). Except Marginal Bund Road from ITO Chungi to G.T. Road which has been widened from two lanes to four lanes the other segments are only single lane roads. Due to construction of I.S.B.T. bridge the traffic pressure on marginal bund road from G. T. Road to Wazirabad road has increased. Similarly the widening of marginal bund road beyond Khajuri Khas crossing upto Loni Border is also to be taken up, so that the traffic coming from UP is straight taken to ISBT bridge through marginal bund road. Though the widening of single lane marginal bund road is being initiated to make them two lanes but ultimately the road has to be widened to four lanes or even six lanes as lot of traffic will generate on this road. The outlay approved for the scheme in the 8th Five Year Plan is Rs. 300 lacs including Rs. 50 lacs in the Annual Plan 1992-93.

13. *C/o Pedestrian Sub-ways at various important Roads—(Rs. 600 lacs)*

With the increase in traffic on main roads it is difficult for the pedestrians to cross such major roads. A study for PWD roads was got conducted by NATPAC for provision of pedestrian sub-ways and the study recommended for construction of sub-ways at 61 locations and work is proposed to be taken up on priority basis. Some locations are I.P. Power Station (Ring Road), Bhikaji Cama Place, Amar Colony Bus Stand, Netaji Nagar, Ashram, Laxmi Nagar (Vikas Marg) G.T.B. Nagar, Mall Road near University, Azadpur Mandi, Rajghat, Bhairon Road, Ring Road at Nauroji Nagar, Ring Road near Double Storey building and Outer Ring Road (Saraswati Vihar).

An outlay of Rs. 600 lacs is approved for C/o Pedestrian Sub-ways in the 8th Five Year Plan 1992-97—including Rs. 30 lacs in the Annual Plan 1992-93.

II. *Municipal Corporation of Delhi—(Rs. 368 crores)*

Major programmes of MCD under Transport Sector are construction/widening/improvements/strengthening urban roads, rural roads, sub-ways, elevated roads, walk ways, Foot-over bridges, grade Separators, Road Over Bridges, Road Under Bridges, fly-overs and development of parking sites. It is also proposed to develop Transport Nagars to decongest the City roads during the 8th Plan period.

The details of some major programmes are as under :—

A. Urban Roads—(Rs. 97 crores)

Some of the urban roads proposed to be taken up for improvement, widening etc. are detailed below :

1. W/I of Najafgarh Road from Zakhira to Najafgarh Town—(Rs. 400 lacs)

(i) SH :—Road from Raja Garden Xing to Tilak Nagar Xing :

An estimate amounting to Rs. 128.40 lacs was approved by MOST vide their letter No. NH/29013/79/87-OR dt. 19-2-88. The ROW of this road is 30m. Provision for widening of carriageway to 8 lanes raising of central verge, const. of footpath and stg. of c/way by providing BM & AC has been made. Provision for street lighting, imp. to drainage system and improvement to inter-section and for const. of bus bays has also been made.

The road widening drainage, central verge has already been completed. The work of dense carpet is in progress.

(ii) From Tilak Nagar Xing to Pankha Road Ph.-I :

This part of the scheme has been sanctioned by MOST vide their letter No. RW/DL/1283/WOR dated 23-11-86 for an amount of Rs. 129 lacs. Widening of road to 2 divided c/way of 2 lanes each has been completed.

(iii) Pankha Road to Kakrola Regulator Ph.-II :

An estimate amounting to Rs. 275.074 lacs has been sent to MOST for approval. The length of this road is 4.92 km. The existing road consists of 2 c/way 7 m Wide each and a c/v of 1.2m width due to numerous colonies along the road, the traffic has increased on this road tremendously and the existing c/way is insufficient to cater to the traffic.

The scheme has been prepared for widening of the road to 8 lanes from RD O to 1500 to take traffic of DDA colony Dwarka and to 6 lanes from road 1500 to 1920. The scheme also includes under ground drainage and side walks on either side. Work is in progress.

(iv) W/I of Najafgarh Road from Kakrola Regulator to Najafgarh :

The storm water of Najafgarh Town & adjoining areas on this road does not find proper outfall & stagnates. DWS & SDU has been requested to prepare a scheme of drainage system & accordingly, after clearance for the drainage scheme by WS&SDU it will be referred to MOST for approval. It is likely to cost about Rs. 200 lacs.

For all these works under the scheme an outlay of Rs. 400 lacs has been provided during 8th Plan 1992-97 including Rs. 50 lacs in the Annual Plan 1992-93.

2. W/I of G. T. Road from Azadpur (Ring Road) to U. P. Border—(Rs. 400 lacs)

(i) W/I of road connecting G. T. Road & Ring Road near Azadpur Bus Terminal :

An estimate amounting to Rs. 48.58 lacs has been accorded Administrative approval from MOST vide letter No. RW/NH/29013/75/91-SR dated

12-7-91. The scheme provides for widening of road from 2 lanes to 6 lanes divided c/way with 1.20m wide c/verge and 2.0m wide footpath on either side of the c/way. Provisions have also been made for stg. of c/way with BM&AC. Imp. to drainage/culverts providing imp. type of Street lighting, Horticultur works, imp. to inter-sections, M. S. Railing, Road signs marking etc. Tenders have been called & work is likely to start during the fag end of 92-93.

- (ii) W/I of G. T. Road from New Eastern approach of ISBT bridge to Road No. 57 :

G. T. Road is an important roads functioning as feeder road to a number of colonies of its either side between old Yamuna bridge and U. P. Border. The road also caters to the traffic to U. P. After completion of new Yamuna bridge near ISBT & Shahdara flyover traffic will increase manifold. At present the traffic intensity on this road is more than 30000 PCU. The present c/way of 1100 m each is insufficient to cater to this traffic causing traffic jams and heavy inconvenience to public.

It is proposed to widen the existing 11.0m wide c/way to 14.0m wide c/way with 1.5m wide footpaths and necessary drainage on either side of central verge to cope the local traffic as well as to and fro through Delhi U. P. Traffic.

This phase of the scheme is under preparation & being sent to MOST for according their administrative approval. Likely cost of this phase is anticipated to be Rs. 250 lacs. Length of the reach is 1.5 km.

- (iii) G. T. Road from Clock Tower to N G Drain :

The scheme for imp. of road is prepared after considering the heavy traffic on the road causing frequent Traffic Jams during peak hours. The scheme is prepared for widening the road, providing central verge, footpath on either sides of the road and providing improved type of street lighting in central verge of the road. The estimate was sanctioned by Ministry of Surface Traasport vide letter No. RW/NH/29013/61/91-SR dated 14-1-92 for Rs. 98.11 lacs. The work is likely to start during 1992-93. An outlay of Rs. 400 lacs is provided for all the reaches during 8th Plan including Rs. 60 lacs during 1992-93.

3. *W/I of Mehrauli Badarpur Road (All reaches)—(Rs. 400 lacs)*

The length of this road is 10.48 km. and existing road width is 11m. This scheme for adding another c/way of 11m is being executed in 4 parts. Estimates for each part has been sanctioned separately.

For part I an estimate amounting to Rs. 135.91 lacs has been sanctioned by MOST vide letter No. RW/NH/1135-WOR dt. 10-10-85.

For part II an estimate amounting to Rs. 241.93 lacs has been sanctioned vide letter No. NH/29013/59/56-OR dt. 3-4-87.

For part III an estimate amounting to Rs. 124.30 lacs has been sanctioned vide letter No. NH/29013/59/86 dt. 3-4-87.

For part IV an estimate amounting to Rs. 86.97 lacs has been sanctioned vide letter No. NH/_9013/34/87/OR (MCD) dt. 16-9-87. It is proposed to widen this road from existing three lane to 6 lines by providing central verge.

The work is in full swing. Widening work is complete except in the road of Vayu Senabad near Lal Kuan portion. The balance work has spilled over to 8th Plan. Accordingly, an outlay of Rs. 400 lacs has been provided in 8th Plan including Rs. 20 lacs in 1992-93.

4. *Widening of Aurbindo Marg—(Rs. 150 lacs)*

(i) Yusaf Sarai to Outer Ring Road :

Aurbindo Marg is one of the main arterial road of the city. It is proposed to improve and strengthen this road from Yusaf Sarai to Outer Ring Road. An estimate amounting to Rs. 93.30 lacs has been sanctioned by MOST.

(ii) Children Home to Qutab :

An estimate amounting to Rs. 73.95 lacs was sanctioned by MOST vide letter No. RW/DL/1146/WOR dated 1-7-85. The length of this road is 1.2 km. The proposal is to widen this road upto 6 lanes with c/verge. Widening & drainage had been complete. Further work is held up due to problem of land acquisition. The remaining work of outfall & dense carpet will be taken after the acquisition of land. The balance work will spilled over to 8th Plan.

(iii) M. B. Road Xing to Mehrauli Mahipalpur Road :

This scheme was sanctioned by MOST for Rs. 246.51 lacs vide letter No. 29013/105/87-SR-MCD dated 5-7-88 & RW/NH/29013/58/90-SR M.C.D. dated December, 90. It had already been widened from 2 to 4 lanes with c/verge. Length of road is 2.4 km. Now under Ph.-II it is being further widened from four lanes to 6 lanes. An outlay of Rs. 150 lacs has been provided during 8th Plan 1992-97 including Rs. 35 lacs in 1992-93.

5. *W/I of roads in Re-settlement Colonies and approach roads—(Rs. 515 lacs)*

(i) W/I of main roads of Mangla Puri re-settlement colony :

There are two main roads having ROW 100' & 80' wide respectively connecting the main Palam Dabri Road. As per traffic requirement the 100' wide road is proposed to be widened from existing two lane to two c/way of three lane c/way separated by 1.2m wide c/verge and footpath on both side of c/way and 60' wide road from two lane to three lane. The scheme amounting to Rs. 56.06 lacs was approved by MOST vide letter No. NH/29013/37/89-SR dated 7-9-89 and Corporation. The work of widening of c/way & footpath has already been completed except Asphaltic concrete.

(ii) W/I of main roads of Sultanpuri re-settlement colony :

The main roads of Sultanpuri are having ROW of 100' & 80' & 60' respectively. As per traffic requirement these roads are proposed to be widened from existing two lane to two c/way of three lane separated by central verge of 1.20m wide on 100' wide road, two lane to four lane in 80' wide roads and two lane to three lane on 60' wide road, with footpath on either

side of c/way. The scheme was approved by MOST vide letter No. NH/29013/38-89-SR dated 7-9-89 as well as Corporation amounting to Rs. 237.56 lacs. The work of widening of c/way to 80' wide roads has already been completed & footpath is in progress. The widening of 100' & 60' ROW roads is in progress.

(iii) W/I of main roads of Mangolpuri re-settlement colony :

The main roads of Mangolpuri are having ROW of 80' & 60' respectively. As per traffic requirement these roads are proposed to be widened from existing two lane to two c/way of two lane each separated by 1.20m wide central verge on 80' wide road and two lane c/way to three lane c/way with footpath on either side of c/way. The scheme was approved by MOST vide letter No. NH/29013/36-89/SR dated 7-9-89, as well as Corporation amounting to Rs. 270.94 lacs. The widening of c/way has already been completed and work on the footpath is in progress.

(iv) Widening & Imp. of road to Dakshinpuri & Madangir, starting from Chirag Delhi road passing through Madangir to M B Road :

This is the main approach road and bus route for Madangir re-settlement colony. The total length of this road is 1.15m and its ROW is 80'.

The existing metalled width of this road varies from 6m to 8m. It is proposed to widen this road to 4 lanes and strengthen the full c/way by providing dense carpetting. It is also proposed to construct 2m wide footpath on both sides and improve the S.W. drainage system. The intensity of traffic of these roads has increased tremendously and with the proposed widening, the traffic movement will be facilitated.

The MOST accorded its approval to this scheme amounting to Rs. 112.10 lacs vide No. RW/NH/29013/20/89-SR dated 16-1-90 and the Corporation accorded his approval vide Res. No. 215/GW/Corpn. dated 2-2-90. The work is in progress. For the 8th Plan an outlay of Rs. 515 lacs is approved including Rs. 75 lacs on the Annual Plan 1992-93.

6. *W/I of colony main roads & peripheral city roads—(Rs. 830 lacs)*

(i) Widening and Imp. of Magazine Road from Khyber Pass to Ring Road :

This is the major link Road between Mall road to Outer Ring Road catering to the traffic of Old Chandrawal, Aruna Nagar & Majnu ka tilla. Therefore, it is proposed to widen the existing c/way into two divided c/way of 7.50m each with 1.20m wide c/verge and 2.50m wide footpath on either side. Accordingly, an estimate amounting to Rs. 119.76 lacs was sanctioned by MOST vide No. RW/NH/29013/92-90-SR dt. Feb., 91. The work is likely to start during 1992-93.

(ii) W/I of Road No. 1, Patel Nagar :

This road runs parallel to the main Patel Road. During peak hours the light vehicular traffic invariably take this road to reach their destination avoiding over-crowded Patel Road. Presently, this road is having 8.2m wide metalled width which is very inadequate for the volume of traffic coming on the road which needs to be widened and improved. A scheme amounting to Rs. 61.18 lacs was approved by the MOST on 13-7-88. This scheme includes widening of the road from 8.2m to 10.5m with 2m wide raised footpath on both sides and under-ground drainage system. Provision of improved type of street lighting is also included in the scheme. The work is in progress.

(iii) W/I of Ganga Mandir Marg :

This road connects arterial roads of Pusa Road to D.B. Gupta Road. The present metalled width of this road is only 7m. The heavy volume of traffic on this road necessitates its widening and improvement. A scheme amounting to Rs. 48.55 lacs was sanctioned by MOST on 14-2-89, with the proposal to widen this road from 7m to 11m in 537m in length and 7m to 14m in 963m in length with 25m raised footpath on both sides with under-ground drainage system. The drainage work is in progress.

(iv) W/I of Ramjas Road :

This important road links the main arterial roads of D.B. Gupta Road and carries heavy traffic. The ROW of this road is 18m. with a metalled width of only 6m. Because of heavy volume to traffic, this road needs to be widened/strengthened. A scheme amounting of Rs. 26.74 lacs has been sanctioned by the MOST on 14-3-89. This scheme includes widening of c/way from 6m. to 14m. With 2m. wide raised footpaths on both sides and under-ground drainage system. Provision of shifting of elect. services improved type street lighting is included in the scheme.

(v) W/I of roads in Karampura :

The scheme for widening and imp. of roads in Karampura was administratively approved by the MOST on 5-12-89. Expr. sanction has also been accorded by the M.C.D. The length of the road is 800m and the ROW of the road is 60'. The work is in progress. There are a number of such roads proposed to be improved and widened in the 8th Plan. For all these works outlay of Rs. 830 lacs is approved for the 8th five year plan 1992-97 including Rs. 50 lacs in 1992-93.

7. *Widening and Imp. of Roads in Okhla Indl. Estate—(Rs. 300 lacs)*

Phase I :—Widening of 60' ROW Roads :

The scheme is estimated to cost Rs. 147.17 lacs. The roads are to be widened from two lanes to three lanes. Provision is made for const. of footpath, drainage system in the main scheme and approved by the MOST in April, 91.

Phase II :—Wid. & Imp. of roads in Okhla Indl. Estate i.e. 60' ROW Roads :

A scheme costing Rs. 268.64 lacs was approved by MOST on 26-12-89 and sanctioned by MCD by Res. No. 266 dt. 267 dt. 22-2-90. The roads are to be widened from 2 lanes to 3 lanes. The work of wid. of c/way is in progress. The work of footpath, drainage and dense carpet is to be taken up. The scheme is to be revised due to DESU demand for shifting of services.

It is also proposed to widen and improve the remaining roads in the Okhla Industrial Area. An outlay of Rs. 300 lacs is approved for the 8th Plan including Rs. 40 lacs in 1992-93.

B. Rural Roads—(Rs. 94 crores)

1. Improvement and Strengthening of existing Rural Roads—(Rs. 1210 lacs)

Some of the major roads proposed to improve and strengthen during 8th five year plan, are as follows :—

(i) Imp. & Stg. of road from Najafgarh Bijwasan Road to Goyalla Dairy :

The road starts from Najafgarh Bijwasan Road near village Deenpur and ends as Najafgarh Drain near Goyalla Dairy. The total length of the road is 4.50 km and existing width is 7.00 m ROW of the road carries from 10m to 15m. The traffic on this road has increased due to the dev. of the area. Accordingly, a scheme for imp. and stg. of this road has been got sanctioned from MOST vide their letter No. RW/NH/29013/10/91-SR dt. 21 Feb., 91 for Rs. 94.14 lacs.

The sanctioned scheme includes provision of strengthening of carriageway by providing B M & A C, brick pavement on side berms, imp. to drainage system with built up section, widening and const. of culverts, street lights, horticulture etc. Work is in progress.

(ii) Imp. & Stg. of road from Pankha Road to Manglapuri (Palam) .

This road starts from Pankha Road and passes through various residential colonies like Indira Park, Sadhnagar, Nasirpur and ends at Manglapuri near village Palam. The total length of the road is 3.50 km and existing width of the road is 7.50 m. The ROW of the road varies from 10 m to 20 m. The existing road surface has deteriorated and needs improvement and strengthening. Accordingly, a scheme for imp. and strengthening of road as per traffic requirement amounting to Rs. 101.04 lacs was approved by MOST vide letter No. RW/NH/29013/99/91-SR dt. 22-10-91. This scheme is likely to start shortly. The scheme includes provision of strengthening of carriageway, improvement to drainage system, street lighting inter-sections central line marking and sign boards etc, Tenders are under process for drainage & B M.

(iii) Widening & Imp. of road from Majra Dabas Chandpur Bajitpur via canal side :

This road starts from the loop road Chandpur Majra Dabas & Ghewra Bawana and ends at Bajitpur. The total length of this road is 9.00 km. Existing road width is 3.75 km. on account of increased intensity of traffic

it requires widening and imp. Accordingly, a scheme for widening and imp. from one lane carriageway to two lane carriageway was approved by MOST vide letter No. RW/NH/29013/80/91-SR dt. 18-9-91 for Rs. 198.60 lacs.

The schemes includes widening of carriageway, strengthening of carriage-way, imp. & drainage system, providing brick pavement on side berms, horticulture, road marking etc.

(iv) Imp. & Stg. of Palam Bagrola Road :

The road starts from Palam and ends at village Shahbad Mohd. Pur via village Bagrola. The total length of this road is 5.4 km. and is single lane carriageway at present. The traffic on the road has increased tremendously and the condition of the road surface is also not traffic worthy. Accordingly, it is proposed to imp. and strengthen Palam Bagrola Road as per traffic requirement and a scheme for imp. and strengthening of Palam Bagrola Road has been sent to MOST for accord of administrative approval, which is expected shortly. The scheme includes provision of two coat of W B M premix and seal coat, 1.20 m. wide brick flooring on either side of single lane carriageway, const. of footpath, street lighting, horticulture, road markings, inter-sections, retaining walls etc.

It has been approved by MOST vide letter No. RW/NH/29013/73/91-SR dt. 11-10-91 for Rs. 116.70 lacs.

(v) Widening & Imp. of Palam Dabri Road :

The road starts from Pankha Road and ends at village Palam via village Dabri. The total length of this road is 3 km. The existing road is of two lanes carriageway. The traffic intensity on the road has increased manifolds due to dev. of the area. Accordingly, a scheme for widening and imp. to four lane divided carriageway was got sanctioned from MOST vide their letter No. RW/NH/29013/42/91-SR dt. 8-5-91 for Rs. 226.908 lacs as per traffic requirement. The scheme includes provision of widening of carriageway, stg. of carriageway, const. of footpath, imp. to drainage system, street lighting, central verge widening of culverts, const. of parapet wall along the flood drain, horticulture, road markings, inter-sections etc. Work of widening is likely to start shortly.

An outlay of Rs. 1210 lacs is approved in the 8th Plan for strengthening and improvement of existing rural roads, including Rs. 170 lacs in 1992-93.

2. *C/O of approach roads to rural & urban villages—(Rs. 400 lacs)*

(i) Imp./widening of link road from Wazirabad Road to village Johripur :

The link road between wazirabad Road and village Johripur is an important link between Wazirabad Road and Karawal Ngr. Road. The road was constructed in 1970 Length of the road is 1.95 km. Traffic on this road has increase manifolds. This road also functioned as an alternative route. All these factors have necessitated the widening of this road. MOST conveyed their administrative approval for Rs. 75.91 lacs vide letter No. RW/29013/66/89-SR dt. 14-6-90.

It is proposed to widen this road to 7 m in place of existing 3.60 m. It also provides for a 2 m wide footpath on either side of the road. Work is in progress.

- (ii) Const. of approach road from Johripur Road to village Dayalpur, Takhmir Pur and Sherpur :

Village Dayalpur, Takhmirpur and Sherpur are old rural villages of Shahdara Zone. There is no pucca approach road from Johripur Road to these villages. The existing approaches are katcha and low lying. It has become essential to construct these roads to reduce pressure on the Karawal Nagar Road.

The total length of these roads is 3.735 km and the lands are free from encroachments at present. It is proposed to construct a carriageway 3.75 m wide after making an earthen embankment. Provision have been made for brick shouldering 1.75 m wide on either side of the road and 2.0 cm premix carpet with seal coat as finished top surface made.

The drain is proposed to be constructed on either side of the road as per suitable cross section for proper disposal of storm water and sullage of the area. The final disposal will be at Gokalpur escape.

Accordingly, a scheme amounting to Rs. 99.87 lacs was approved by MOST vide letter No. NH/29013/28-91-SR dt. 10th April, 91. Work is under process of award and likely to start during 1992-93.

Apart from the above there are several more roads which are to be taken up under this scheme. An outlay of Rs. 400 lacs is approved for all these schemes in the 8th five year plan including Rs. 150 lacs in 1992-93.

3. *W/I of Patparganj Road—(Rs. 210 lacs)*

This is a main bus route from Jheel Chowk to village Patparganj length is 4.7 km. ROW is 30 m. A no. of thickly populated colonies fall on either side of this road. As such traffic is very heavy on this road. Therefore, it is proposed to widen this road to two divided c/way of 7.5 m each with 3 m wide cycle tracks on either side with 2 m wide footpath on the extremities.

The scheme costing Rs. 239.55 lacs was got sanctioned from MOST vide letter No. 29013/69/87/OR (MCD) dt. 17-3-88. This amount has now been revised to Rs. 414 lacs on a/c of extra ordinary increase in demand for street lighting & shifting of L V Mains which has increased from 13.4 lacs to Rs. 226 lacs as demanded by DESU. Work of widening of carriageway, central verge, footpath & drainage is almost complete. An outlay of Rs. 210 lacs is approved in the 8th Plan including Rs. 30 lacs in 1992-93.

4. *W/I of Najafgarh Dhansa Road (All Phases)—(Rs. 600 lacs)*

Dhansa road is two lane carriageway giving link to residents of village like Metras, Surehra, Jaffarpur, Mundela Kalan, Mundela Khurd, Bakhargarh, Kazipur, Issapur, Dhansa etc. Traffic intensity on this road has increased tremendously. It is proposed to widen and improve it from two lane to four lane carriageway. The total length of this road is 18 km. MOST has accorded administrative approval in three phases so far while the estimate for the remaining phases are being sent to MOST.

1. Phase I :—From Najafgarh to Surhera 'morh' for a length of 3.7 kms. vide MOST letter No. 29013/10/89-SR dt. 15-3-90 for Rs. 124.82 lacs.
2. Phase II :—From Surehra turn to Mundela turn for a length of 4 km vide MOST letter No. 29013/33/91-SR dt. May, 91 for Rs. 246.083 lacs.
3. Phase III :—From Chawla stand to Dhansa stand vide letter No. 29013/34/91-SR dt. 8-5-91 for Rs. 71.365 lacs.

The scheme includes provision for widening and strengthening of carriageway, imp. of drainage system, street lighting, widening of culverts, horticulture, central line marking etc. Work is in progress. An outlay of Rs. 600 lacs is approved in the 8th five year plan including Rs. 30 lacs in the Annual Plan 1992-93.

5. *Widening & Imp. of Najafgarh Jharoda Road (All Phases)—(Rs. 170 lacs)*

The length of Najafgarh Jharoda Road from Najafgarh to Haryana Border is 7.5 km. ROW is 25 m. The traffic on this road has increased manifolds due to the dev. of the adjoining area and Najafgarh drain Mandi and accordingly scheme for widening from two lane to four lane carriageway has been approved from MOST in four phases as detailed below :—

- Ph. I :—From Najafgarh to CRP Camp for Rs. 99.57 lacs vide MOST letter No. 29013/55/88/SR dt. 11-8-88.
- Ph. II :—From CRP Camp to Haryana Border for Rs. 110 lacs vide MOST letter No. 29013/8/89-SR dt. 1-8-89.
- Ph. III :—From Jharoda stand (Najafgarh) to Nangloi stand (Najafgarh) for Rs. 74.454 lacs vide MOST letter No. 29013/36/91-SR dt. 10-5-91.
- Ph. IV :—Provision of street lighting was got sanctioned from MOST.

The scheme includes provision of widening and strengthening of carriageway, const. of central verge, imp. to drainage system, const. of footpath, const. of retaining wall, widening of culverts, horticulture shifting of poles & providing street lights etc.

The work on scheme was taken up 89-90 and is likely to be completed by 1993-94. The work of widening of carriageway & stg. of carriage has been completed. Drainage in Ph. III is in progress. Advance payment for street lighting under Phase IV is being made.

For the 8th five year plan an outlay of Rs. 170 lacs is approved including Rs. 30 lacs in the Annual Plan 1992-93.

6. *W/S of Auchandi Road (All Phases)—(Rs. 750 lacs)*

The Auchandi Road is of 21.5 km from Sanjay Gandhi Transport Nagar to Auchandi Border and is two lane carriageway. The traffic on this road has increased manifolds and accordingly a scheme for widening and imp. of Auchandi Road from two lane to four lane has been prepared in Seven Phases. This scheme includes provision for widening of carriageway, stg. of road, imp. to drainage system, widening of culverts, const. of f/path & c/verge, shifting of electric poles & water supply line, provision for improved type of street lighting & horticulture work has been taken.

The amount of five phases sanctioned from MOST are as below :—

(i) Phase I :—From Sameypur Badli Rly. Xing to Shahbad Daulatpur :

Work of widening of carriageway has been completed, work of const. of f/path & central verge is in progress, improvement to drainage system & construction of culvert etc. are in progress. Stg. of road work will be carried out soon. MOST sanctioned the work on 2-8-89 for Rs. 109.5 lacs.

(ii) Phase II :—From Bawan village to Pooth Khurd Store (MCD)

Work of widening of carriageway has been completed. Stg. of road is in progress. Imp. to drainage system has been completed & other work like footpath & c/verge & shift of electric line etc. will be taken up in due course. MOST sanctioned the work on 19-12-90 for Rs. 97.86 lacs.

(iii) Phase III :—From Pooth Khurd Store to Prehladpur village :

Work of imp. to drainage system and const. of b/wall is in progress. Remaining work like widening of carriageway, stg. of road, const. of central verge & f/path, extension of culvert and shifting of electric poles will be carried out in due course of time. MOST sanctioned the work on 29-5-92 for Rs. 299.345 lacs.

(iv) Phase IV :—From Shahbad Daulatpur to Prehladpur village :

All the works will be taken up in due course. MOST sanctioned the work on 13-12-91 for Rs. 140.82 lacs.

(v) Phase V :—From Bawana village to Dariyapur village :

MOST sanctioned the work on 17-5-92 for Rs. 276.32 lacs.

For all these works an outlay of Rs. 750 lacs is approved in the 8th five year plan 1992-97 including Rs. 50 lacs in the Annual Plan 1992-93.

7. W/I of Narela Bawana Road—(Rs. 300 lacs)

Narela Bawana Road is 7.5 km. and is two way carriageway. The traffic on this road has increased manifold. Stg. of Narela Bawana Road from two lane to four lane in two phases were sanctioned by MOST. This scheme includes provision of widening of carriageway, stg. of c/way. Extn. of culverts, const. of b/walls, shifting of electric poles and improved type street lighting.

Details of sanction and position of works are as under :—

Phase I :—From Bawana village to Ghoga Sanoth X-ing :

MOST sanctioned the work for Rs. 99.52 lacs on 16-4-91. The work of extn. of culvert const. of drains & b/walls is in progress.

Phase II :—From Narela towards Ghoga Sanoth Xing :

The work of W/I of carriageway, footpath and b/walls is yet to be taken up. MOST sanctioned the work on 15-7-92 for Rs. 282.855 lacs.

For the 8th plan an outlay of Rs. 300 lacs is approved and including Rs. 30 lacs in 1992-93.

8. *Widening & Imp. of Road No. 3 (All phases)—(Rs. 700 lacs)*

(i) Part I—From Mangolpur Kalan to Kanjhawala Chowk :

The length of road No. 3 from Mangolpur Kalan to Kanjhawala Chowk is 11.2 km. ROW is 25m. The traffic on this road has increased manifold due to the dev. of adjoining areas and villages falling along the road such as Mangolpur Kalan, Mangolpur Khurd, Pooth Kalan, Begumpur, Mohammadpur Majri, Karala and Kanjhawala. The residential scheme of Rohini is also being developed by DDA along both sides of the road. The scheme for widening of existing two lane to four lane carriageway was sanctioned by MOST in phases as per the details given below :—

1. Phase I :—From Kanjhawala to Karala for Rs. 80.758 lacs sanctioned by MOST on 7-7-88.
2. Phase II :—from Mangolpur Khurd to Pooth Kalan for Rs. 99.36 lacs sanctioned by MOST on 8-8-88.
3. Phase III :—From Karala to Pooth Kalan for Rs. 96.09 lacs sanctioned on 24-7-88.
4. Shifting of water main for Rs. 129.467 lacs sanctioned on 2-7-91.
5. Improvement to drainage system for Rs. 49.375 lacs sanctioned on 2-7-91.

The scheme provides for widening and stg. of carriageway, imp. to drainage system, const. of central verge, footpath, widening of culvert, street lighting, shifting of water line, horticulture etc.

The scheme was taken up in 1988-89. The work of widening of carriageway for all the phases were completed. The work of stg. of carriageway, const. of c/verge, imp. to drainage system, widening of existing culverts, const. of footpath are in progress.

(ii) From Kanjhawala Chowk to Auchandi Road :

The total length of the road from Kanjhawala chowk to Auchandi road is 11 km. ROW is 25 km. The traffic on this road has increased manifolds as heavy traffic like trucks, tempos etc. ply on this from Delhi side as well as Haryana side and also due to the w/imp. of remaining portion of road No. 3 from Mangolpur Kalan to Kanjhawala chowk and dev. of the adjoining area along the road. Accordingly, the scheme for w/imp. from two lane to four lane carriageway has been prepared in phases & sent to MOST for according administrative approval as per the details given below :—

1. Phase I :—from Kanjhawala chowk to Jaunti turning amounting to Rs. 193 lacs.
2. Phase II :—from Jaunti turning to Qutabgarh for Rs. 217 lacs.

The scheme provides for widening and strengthening of carriageway, const. of c/verge, footpath in inhabited area, widening of culverts, imp. to drainage system, street lighting, horticulture, road sign and road marking etc.

For the 8th Plan an outlay of Rs. 700 lacs is approved for the scheme including Rs. 52 lacs in the Annual Plan 1992-93.

9. *W/I of Rawta Road (All Phases)—(Rs. 500 lacs)*

Rawta road is two lane carriageway giving link to the residents of villages Samaspur khals, Ujwa, Daryapur Khurd, Rawta, Daula, etc. to Najafgarh through Najafgarh Dhansa road. Traffic intensity on this road has increased. Scheme for widening and imp. of Rawta road from two lane to four lane carriageway has been prepared in phases. The total length of Rawta road is 8.1 km. MOST has accorded administrative approval for two phases.

Phase I :—From Najafgarh Dhansa road to village Ujwa; for a length of 3.1 km. vide MOST letter No. RW/NH/29013/97/91-SR dt. Dec. 91 for Rs. 216.11 lacs.

Phase II :—From village Ujwa to Daryapur Khurd for a length of 2.5 km. vide MOST letter No. RW/NH/29013/117/91-SR dt. Dec. 91 for Rs. 124.21 lacs.

Phase III :—From village Daryapur Khurd to Rawta drain for a length of 2.70 km. This estimate is being sent to MOST.

The tenders for both the phases are being called, shortly. For the 8th Five Year Plan an outlay of Rs. 500 lacs is approved including Rs. 30 lacs for the Annual Plan 1992-93.

10. *Widening & Imp. of Najafgarh Nangloi Road (All Phases)—(Rs. 350 lacs)*

The length of Nangloi, Najafgarh road is 12.2 km. and ROW is 25 km. The traffic on this road has increase manifold due to dev. of the adjoining area and village such a Nangloi, Kamruddin Nagar, Ranhola, Tilangpur Kotla, Baprola and Najafgarh. It is proposed to widen this road from two lane to four lane divided carriageway which has been got sanctioned from MOST in three phases as detailed below :—

Phase I :—From Najafgarh to Tilangpur Kotla for Rs. 193.79 lacs vide MOST letter No. 29013/5/89 dt. 26-12-89.

Phase II :—From Tilangpur Kotla to Nangloi for Rs. 293.00 lacs vide MOST No. 29013/45/90 dt. 17-10-90.

Phase III—From Nangloi stand (Najafgarh) to Chhawla stand (Najafgarh) for Rs. 86.33 lacs vide letter No. 29013/35/91 dt. 10-5-91.

The scheme provides for widening and stg. of carriageway, const. of central verge, footpath, retaining wall, wid. of culverts, const. of drain, shifting of electric lines, street lighting, horticulture and centre line marking and road sign boards etc.

The work of widening of carriageway in Ph. I & II is in progress and the other works in all the phase are being taken.

An outlay of Rs. 350 lacs has been provided in the 8th Plan 1992-97 including Rs. 30 lacs in 1992-93.

11. *Widening & Imp. of Najafgarh Bijwasan Road (All Reaches)—(Rs. 500 lacs)*

The total length of this road from Najafgarh to Kapashera 'morh' is 16 km. ROW is 25m. The traffic on this road has increased manifold due to dev. of adjoining area. This road also serves as an important link to IAAI and NH 8. Accordingly

the scheme for widening from two lane to four lane carriageway has been got sanctioned from MOST in four phases as per the details given below :—

Phase I :—From Najafgarh to Jhatikara 'morh' for Rs. 91.85 lacs sanctioned on 6-10-89.

Phase II :—From Kapashera 'morh' to Bijwasan Rly. Xing for Rs. 198.59 lacs sanctioned on 17-5-90.

Phase III :—From Bijwasan Rly. Xing to Najafgarh drain for Rs. 178.52 lacs sanctioned on 30-5-90.

Phase IV :—from Najafgarh drain to Jhatikara 'morh' for Rs. 196.809 lacs sanctioned on 21-1-91.

The scheme provides for widening/stg. of carriageway, const. of c/verge, f/path, imp. to drainage system, widening of culverts, street lights, horticulture and central line marking and road sign boards etc.

The work of widening of c/way, stg. of c/way, for Ph. I have been completed, while the work of widening of c/way for Ph. II and III are in progress.

For the 8th Plan outlay of Rs. 500 lacs is approved including Rs. 30 lacs in 1992-93.

12. W/I of Ghewra Bawana Road (All Phases)—(Rs. 300 lacs)

Ghewra Bawana road is a two line c/way. Owing to the growth of village like Ghewra Kanjhawala Swda, Majra Dabas and Bawana and establishment of LPG Gas Plant at Ghera, the traffic inensity had increased manifolds. It is proposed to widen and imp. Ghewra Bawana road in five phases. The total length of the road is 14.5 km. All the five phases have been sanctioned by MOST/Corpn.

Phase I :—From Ghewra Morh to Ghewra village sanctioned from MOST/Corpn. for a length of 1.5m vide their letter No. 29013/79/88-SR dated 10-1-89 for Rs. 44.69 lacs.

Phase II :—From Ghewra village to Kanjhawala hospital sanctioned from MOST/Corpn. for a length of 2.25 km. vide MOST No. 29013/11/90-SR dt. 10-5-90.

Phase III :—From Kanjhawala hospital to Kanjhawala Chowk sanctioned from MOST/Corpn. for a length of 2.5 km vide letter No. 29013/69/90-SR dt. Feb. 91 for Rs. 140.843 lacs.

Phase IV :—From Kanjhawala Chowk to Prem Piao sanctioned from MOST/Corpn. for a length of 4.1 km. vide their letter No. 29013/96/91/SR dt. 22-3-91 for Rs. 153.29 lacs.

Phase V :—From Prem Piao to Bawana sanctioned from MOST/Corpn. for a length of 4.1 km. vide MOST letter No. NH/29013/95/91-SR dated 22-3-91 for Rs. 171.55 lacs.

The widening of Ph. I, II has already been completed. Tenders for Ph. III & Ph. IV for widening and stg. are under approval. Tenders for widening and stg. for Ph. V is being called shortly.

For all these works an outlay of Rs. 300 lacs is approved in the 8th Five Year Plan 1992-97 including Rs. 30 lacs in 1992-93.

C. Bridges, Flyover grade Separators etc.

1. *C/o ROB on Rly. Line connecting S.P. Mukherjee Marg with Azad Market—(Rs. 150 lacs)*

Objective of this scheme is to provide smooth flow of traffic between Azad Market and S.P. Mukherjee Marg connecting Qutab Road with Zorawar Singh Marg. The existing road of 24'-9" has been widened to 2 carriageway of 48' each with 4' central verge and 10' footpath on either side making it 6 lane carriageway and cycle track. This scheme includes raising of existing bridge i.e. widening of Pul Mithai and Queen's road bridge. An estimate amounting to Rs. 468.66 lacs had been sanctioned by MOST vide their letter No. RW/DL/169/WOR dt. 8-6-82. The estimate is likely to be revised to Rs. 1058.24 lacs which include M C D share of Rs. 1028.47 lacs. The work of raising of Queen's road and widening of S.P. Mukherjee Marg has been completed. The work of widening of Pul Mithai and raising work is in progress. Rs. 444.00 lacs were spent on this scheme. The remaining work has spilled over to 8th Plan. Accordingly, Rs. 150 lacs has been provided in 8th Plan 1992-97 including Rs. 50 lacs in 1992-93.

2. *Widening of Lothian Bridge—(Rs. 200 lacs)*

The scheme aims at removing the existing each bridge which was a bottleneck for the huge traffic and there was only one way traffic through the existing arch bridge and causes great hindrance at this very important junction. The scheme for widening the existing arch bridge to 4 nos. x 7.5 m spans was originally approved by MOST for Rs. 560.516 lacs. Which was inclusive of Rs. 5.86 lacs of Rly. share vide their letter No. RW/DL/691/WOR dated 22-1-1983 and further the scheme was revised in light of the nature of traffic & adding therein two more boxes of 7.5 m each for slow moving traffic. The revised approval for Rs. 1859.04 lacs was accorded by MOST vide their letter No. NH/29013/12/87-SE (MCD) dt. 17-5-89 which is inclusive of Rs. 1470 lacs of Rly. share.

The scheme also includes improvement of intersection of S.P. Mukherjee Marg with Subhash Marg, const. of pump well & pump house, regarding of approaches connecting of Lothian bridge & providing improved street lighting. The actual execution of the scheme was started on 10-9-86 & the original target date of completion was 10-1-88. This bridge has been opened to traffic.

Main work is being executed by Northern Railway as a deposit work. Balance payment of Rs. 452 lacs towards capitalising the maintenance charges is still to be paid to Rlys. Accordingly, Rs. 480.00 lacs will be required during 1992-93. An outlay of Rs. 200 lacs is provided for the Scheme in the 8th Five Year Plan 1992-97.

3. *RUB-23 connecting Mathura Road and Mehrauli Badarpur Road—(Rs. 300 lacs)*

The objective of this scheme is to remove the existing level crossing near Tughlakabad Marshalling Yard as this level crossing remains closed for road traffic for nearly 20 hours in a day thus causing lot of time loss & inconvenience for road traffic going or coming towards Mathura Road/Mehrauli. The scheme was approved by MOST amounting to Rs. 2010.73 lacs vide their letter No. RW/DL/1074/WOR dated 31-12-85 and approved by Corporation for Rs. 1998 lacs vide Res. No. 950 dated 23-12-85. Estimate has been revised to Rs. 3310 lacs which include Rly. share as 2145 lacs. The bridge under construction will be of 75 m in length with 300 m long approach road on Mathura road wide & 813 m long approach road, towards M B road side, total length

being 1188 m. The scheme includes (i) const. of road under bridge consisting of 4 boxes of 7.5 width each & 2 boxes of 9 m width each (ii) const. of 2 nos. carriageways of 14 m width each and two service roads 7.5m each (iii) const. of footpath separators central verge (iv) const. of sump and pump house (v) providing improved type street lighting.

The scheme is being executed as per original estimates/traffic study and as per approved plan of DDA and work is in full swing. Two span had already been opened to traffic. Balance work is likely to be completed by Dec., 92.

The work is at present held up on account of land dispute which is being sorted out with DDA. The expr. upto 30-8-92 is Rs. 1636.35 lacs and payment of Rs. 1674 lacs is still to be made. An outlay of Rs. 300 lacs is approved for the scheme in the 8th Plan 1992-97 including Rs. 181 lacs in the Annual Plan 1992-93.

4. *Const. of two addl. openings by the side of existing RUB 12 near Zakhira - (Rs. 800 lacs)*

The existing RUB 12 at Zakhira is not sufficient to cope up with the increased volume of traffic. This results in blockage of traffic especially in peak hours. So an estimate amounting to Rs. 320.74 lacs has been sanctioned by MOST vide letter No. RW/DL/290-B/44/86/MCD/OR dated 7-1-87. In the estimate two addl. openings by the side of existing RUB 12 with conventional girders methods are to be constructed. Later on due to adopting "Box pushing Technique" by Rly. the scheme was revised to Rs. 1345.37 lacs and was approved by MOST vide letter No. RW/NH/29013/44/86/MCD. Main work is to be done by Rlys. Advance has been paid to Rlys. Anticipated expr. during 92-93 will be Rs. 100 lacs. An outlay of Rs. 800 lacs is approved during 8th Plan 1992-97 including Rs. 100 lacs during 92-93.

5. *Grade Separator cum flyover over on S.S. Light Rly. Line on G.T. Road Shahdara— (Rs 3070 lacs)*

With the completion of bridge on River Yamuna near I S B T, it has become very essential to construct flyover bridge-cum-grade separator on s s light Rly. on G.T. Road to meet the demand of through vehicular traffic from Delhi to UP.

This bridge will also cater to the demand of vehicular traffic generated with dev. of large no. of new colonies by the DDA, in Trans-Yamuna area near the border and Institutional complex & Jhilmil Industrial area. The following provisions have been made in the scheme :—

1. Elevated road having 4 lane divided c/way in a length of 1.207 km. for the through traffic.
2. Road over bridge having 7 lane divided c/way in a length of 0.423 km.
3. Service roads having 3 lane c/way (11.00' wide) in a length of 0.780 km. on either side of ROB.
4. 2.5m wide footpath on external sides of the service rd. in the entire length.
5. Two pedestrians Subways.
6. Suitable turn arounds for the service roads between the elevated roads.

Accordingly, a scheme amounting to Rs. 1936.01 lacs was approved by MOST vide their letter No. RW/DL/1240/WOR dated 24-4-87. This scheme was also cleared by DDA and Delhi Urban Arts Commission.

On account of extension of alignment of bridge by about 318m to have direct link of Master Plan Roads 58 and 64 through GT Road on the request of Delhi Administration revised cost of the scheme is anticipated to the tune of Rs. 4500 lacs and also due to increased cost of shifting charge by DESU, WS & SDU & compensation of affected proprietors and increased price index. The work started in Oct., 89 and 74% work has been completed. The scheme is expected to be completed by October, 1993.

Now the revised cost is anticipated to be Rs. 4655 lacs. Which includes the extended portion of the length of bridge by about 318 mtr. and to meet the other condition of the MOST.

An outlay of Rs. 3070 lacs is approved for the 8th Five Year Plan including Rs. 550 lacs for the Annual Plan 1992-93.

6. *C/O of R.U.B. connecting Ashok Vihar with Wazirpur Indl. Area—(Rs. 150 lacs).*

The existing level crossing is a big bottleneck for traffic. Lot of time is wasted as waiting period when the level crossing is closed. Accordingly, it is proposed to construct a Road Under Bridge at this site. A project estimate amounting to Rs. 297.82 lacs has been sanctioned by MOST vide letter No. RW/NH/29013/28/87 dated 30-3-88. This includes the c/o approaches & RCC retaining walls. There is a provision of 2 c/way of 11 m with central verge of 1.2m & 1.5m wide footpath on either side. Work is in full swing and likely date of completion is 31-3-93. For the 8th Plan an outlay of Rs. 150 lacs is approved including Rs. 100 lacs for the Annual Plan 1992-93.

7. *Const. of Road-Under-Bridge at level crossing on Patparganj road near Madhuban, Shahdara—(Rs. 500 lacs)*

The level crossing situated near Madhuban on Patparganj road connects Vikas Marg to Patparganj enroute Mother Dairy. At this level crossing perpetual traffic jams occur as about 110 to 120 trains pass on this track round the clock. During frequent closures of the Rly. crossing, vehicles get lined up on both sides and people have to wait for a considerable time. This problem is likely to aggravate with coming up of a number of new colonies and Group Housing Societies on both sides of this crossing. Provision of R U B at this location will provide much needed relief to the public in general.

A project estimate amounting to Rs. 4.93 crore was approved by the Ministry of Surface Transport Govt. of India, for const. of RUB and its approaches. RUB in the Rly. portion will be constructed by the Rlys. with Box-pushing technique to minimise dislocation of traffic during construction period. Salient features of the scheme are as under :—

- | | |
|-----------------|--|
| 1. Length | 475m including the Rly. portion. |
| 2. Right of way | Vikas Marg side—80 ft. Mother Dairy side—100 ft. |

- | | |
|---------------------------------|--|
| 3. Under bridge in Rly. portion | Two no. RCC boxes each of 35.m long and 9.m wide |
| 4. Clear height of bridge | 5.5m |
| 5. Approaches | Two divided carriageways of 7.5m each with 1.2m wide central verge and 1.5m wide footpaths on either side of the level crossing. Gradient to approaches will be 1 in 60. |

Rlys. has been paid Rs. 0.32 lac towards survey and planning charges and the case for the payment of further advance of Rs. 2.0 crores has been initiated.

For the 8th Five Year Plan an outlay of Rs. 500 lacs is approved including Rs. 100 lacs in the Annual Plan 1992-93.

New Schemes :

1. *C/o Grade Separator at the Intersection of Outer Ring Road and Road Leading to G K II near Savitri Cinema—(Rs. 50 lacs)*

The scheme amounting to Rs. 668.86 lacs has been submitted for according administrative approval of MOST, Govt. of India. The length of the Grade separator is 414.0 m having two c/way of 9.0 m each divided by 1.0 m wide central verge and 0.80 m wide wheel guard on either side of the c/way with RCC decking and railing. The surface c/way running parallel to grade separator is of 9.0 m wide with 2.0 m c c footpath on either side, besides service road of 5.5 m width towards GK II enclave. Provision has been made for pedestrian subway across 80' ROW GK II near Savitri Cinema and improved type of street lighting. For the 8th Five Year Plan 1992-97 a token provision of Rs. 50 lacs is made including Rs. 35 lacs in the Annual Plan 1992-93.

2. *C/o Grade Separator at Outer Ring Road Lala Lajpat Rai Marg Intersection near Paras Cinema—(Rs. 50 lacs)*

This scheme amounting to Rs. 864.75 lacs has been sent to MOST for administrative approval. The length of the Grade separator is 565 metre having two c/way of 9.00 m each separated by 1.0 m wide central verge and 0.80 m wide wheel guard on the either side of the c/way with RCC decking and railings. The surface c/ways running parallel to grade separator is of 9.00 m wide with 2.00 m cc footpath either side beside service road of 5.50 m width towards Nehru Place side and Pamposh Enclave side. There is also proposal to develop car parking under the decking of the bridge at the intersection in front of the Paras Cinema. Provision has also been made one at the intersection and the other near the bus terminal. Improvement has also been proposed to the rotary near Kalkaji temple, and existing street lighting. For the 8th Five Year Plan a token provision of Rs. 50 lacs is made including Rs. 22 lacs in the Annual Plan 1992-93.

3. *Construction of Grade Separator at intersection of Jail Road and Najafgarh Road near Tilak Nagar—(Rs. 700 lacs)*

The volume of traffic on this intersection is fast as well as slow moving and has increased tremendously and lot of congestion and interruption disturb the flow of traffic even after widening the road. Therefore, it is proposed to construct a grade sep. on this intersection.

It is necessary to appoint some expert consultants to prepare the project report. To obtain the consultancy services an estimate of Rs. 26.25 lacs was approved from MOST vide letter No. RW/NH/29013/89/91-SR dt. 11-9-91 and the consultant has been appointed. For the 8th Five Year Plan an outlay of Rs. 700 lacs is approved including Rs. 25 lacs in the Annual Plan 1992-93.

Development of Parking Sites :

1. Imp. of Parking Sites and Garrages—(Rs. 1400 lacs)

(i) Multi level Car & Scooter Parking at Church Mission Road :

At present there is acute shortage of parking space in the vicinity of old Delhi Rly. Station and Cloth Market at Church Mission Road in the walled city area. Therefore, a scheme to park 388 cars & 414 scooters besides other infrastructure like restaurant, medical store, toilet etc. is prepared. In the basement there will be parking for cars and on the G.F. there is provision for scooters and cars and on the terrace there will be terrace garden.

MOST has approved this scheme for Rs. 682.027 lacs vide letter No. 29013/19/87/OR (MCD) dt. 26-11-87. Corporation has accorded expenditure sanction vide Resolution No. 773 dt. 14-10-86 work is in full swing and likely to be completed by Dec., 1993.

(ii) Const. of Underground Parking at Gandhi Ground :

To meet the shortage of parking space in Chandni Chowk area, work of construction of underground parking at Gandhi Ground at an estimated amount of Rs. 455.10 lacs was sanctioned by MOST vide letter No. 29013/4 city/VII/POR dt. 27-11-87. The work is in full swing and likely to be complete by Nov., 1992. The work when completed will allow 755 cars & 284 (approx.) scooters for parking. The work of this scheme was started on 13-8-88.

(iii) Construction of parking lot at J. L. N. Marg opp. L. N. J. P. Hosp.

To meet the acute parking problem on Asafahi road and to meet the demand of walled city, the work of developing the green strip opp. L. N. J. P. Hospital into a 3 level under ground parking lot at an estimated cost of Rs. 933.81 lacs was got approved from MOST vide letter No. RW/DL/1228/WOR dt. 26-11-87. Consultant had been appointed for the project for preparing detail design & drawings. There is provision for parking of 700 car and 255 scooters & 360 cycles. Work is in progress since 16-6-91. Work is likely to be completed during 93-94.

For all the above three schemes an outlay of Rs. 1400 lacs has been made in the 8th Plan 92-97 including Rs. 500 lacs in the Annual Plan 1992-93.

C/o Subways/Walkways/Foot over Bridges—(Rs. 1000 lacs)

C/o subways on various important roads :—

(i) Pusa Road.

(ii) Mathura Road.

(iii) Lal Bahadur Shastri Marg near cremation ground.

Schemes for const. of three pedestrian subways has been approved by MOST for Rs. 72.24 lacs. The locations of the proposed subways across above mentioned roads had been identified by National Traffic Planning and Research Centre (NATPAC) on the basis survey made by them. Work of const. of subway across Lal Bahadur Shastri Marg near cremation ground is in full swing & nearing completion. Work of soil investigation is under award for work on Mathura Road near Zoo.

(iv) Road No. 13 near Madangir X-ing :

The proposed subway has been approved by layout scrutiny Committee detailed estimate amounting to Rs. 170 lacs has been prepared which is being sent to MOST for obtaining their administrative approval. The subway will be constructed in the length of 30 m. approximately with provision of shops in the passage. Length of this subway is 28 m & width is 6 m. ROW of the road is 150 feet.

(v) Boulevard Road near Tis Hazari :

A scheme for Rs. 87.83 lacs has been approved by MOST. It provides for construction of subway across Boulevard Road providing relief to the huge pedestrians coming and going to Tis Hazari Courts and its surrounding area.

(vi) C/o of subway at Bahadur Shah Zaffar Marg :

Bahadur Shah Zaffar Marg is one of the most busy road in Delhi with huge pedestrian traffic.

It is, proposed to construct a sub-way on this road in front of Inderprastha post office on one side and in front of Times House on the other side, for the convenience of the vehicular traffic. The location of this subway has been decided after carrying out the detailed survey. The length of the subway will be 50 ms. and its proposed clear width is 5.5 m. with a clear head way of 2.5 m. It is proposed to make suitable arrangements for ventilation, electrification, drainage, shifting of existing poles/cables or under ground services & M.S. Grills etc.

The project estimate was approved by MOST for Rs. 55.34 lacs vide letter No. RW/NH/29013/66/90-SR dt. 20-11-90 and subsequently approved by Corporation Res. No. 1510/GW/Corp. dt. 12-7-91. Tenders for the main work were invited and under process of approval of competent authority. The work is likely to be started during 1992-93.

Some of other sub-ways proposed to take-up during the 8th Plan period

are at :—

1. Pusa Road near Spring dales School
2. Swami Satyanand Marg near Chatterpur Temple
3. N.G. Road near MIG Flats Subhash Nagar
4. Lal Bahadur Shastri Marg near Defence Colony
5. N.G. Road near Kirti Nagar

6. New Delhi South Extention between Part I & II on Ring Road
7. Lala Lajpat Rai Marg near Sri Ram College
8. Khan pur on M.B. Raod
9. Red fort crossing Chandni Chowk
10. Opposite Cambridge School Rajouri Garden
11. G.T. Road Shahdara near Shyamlal College
12. Road No. 13 (Madangir Road) near Sheikh Sarai Phase-II
13. Mathura Road near Exhibition Ground at each gate (3 Nos.)
14. Lala Lajpat Rai Market in between Mool Chand flyover and Defence Colony
15. I.P. Marg opposite MSO Building
16. Delhi Gate Crossing
17. Netaji Subhash Marg
18. S. P. Mukherjee Marg opposite Rly. Station—2 nos.
19. Arya Samaj Road near Ajmal Khan Road and Ghaffar Market
20. Sarai Rohilla overbridge to connect East Moti Bagh and West Moti Bagh.

For the 8th Five Year Plan 1992-97 an outlay of Rs. 1000 lacs is approved for c/o Sub-ways, walkways/Foot overbridges on important roads including Rs. 116 lacs for the Annual Plan 1992-93.

Transport Nagars—(Rs. 1000 lacs)

To ease congestion it is proposed to develop Transport Nagar near the entry point of each National Highway into Delhi on the pattern of Sanjay Gandhi Tsansport Nagar. This will check the heavy goods vehicle from entering the city and will have a great impact on Inner City Transportation Net work. These will unload the goods at these Transport Nagars from where it will be moved to their proper destinations. Interstate goods passing through Delhi will thus not enter the heart of the city. Main Bazars & wholesale markets will thus be free from heavy goods traffic and acute chronic parking problem during loading & unloading period.

These Transport Nagars will be self sufficient and will have adequate provision of parking sites, Idle parkings, petrol pump service station, repair workshop, Dhabas, Restaurants, domitory type rest houses for drivers/cleaners etc. and community facilities. Developed plots will be sold on remunerative basis.

Each transport nagar will have about 1500-2000 plots and will cost about Rs. 20-25 crores depending upon its size & location. DDA has been approached to provide land for the following :

1. N H 2 Mathura Road near Badarpur Thermal Plant.
2. N H 1 Rohtak Road Tikri Border.
3. Loni Road Border.
4. N H 24 G T Road near Kalyanpuri.
5. N H 8 Gurgaon Road near Indira Gandhi Airport.

So far no allotment of land has been made by DDA. An outlay of Rs. 25 lacs has been made in 1992-93 for purchase of land at any of the above sites.

It is, proposed to have the revolving fund of Rs. 10 crores during 8th Plan which will go a long way in not only recycling the money for this remunerative project but will help MCD/Delhi Administration in mobilising the additional resources of income.

The approved outlay for the Scheme in the 8th Five Year Plan 1992-97 is Rs 10 crores including Rs. 25 lacs for the Annual Plan 1992-93.

III. New Delhi Municipal Committee

An outlay of Rs. 2500 lacs is approved for Roads and Bridges Schemes of N.D.M.C. for the 8th Five Year Plan 1992-97 out of which the outlay approved for the Annual Plan 1992-93 is Rs. 600 lacs. At the end of the Annual Plan 1991-92 NDMC has 1293.03 kms Single Lane width road. The target for the 8th Plan period is to add 10 kms of Road length including 2 kms in 1992-93. Some Major schemes are as follows :—

1. Procurement of special T&P for c/o roads including Second Hot Mix Plant— (Rs. 150 lacs)

It is proposed to instal second Hot Mix Plant to meet the requirement of departmental works. The present Hot Mix Plant is being used for re-surfacing some of the main roads and colony roads. Certain repair works including restoration of roads are carried out departmentally. 'Mix.' Capacity of existing H.M.P. at present is about 30,000 tonnes per annum only whereas the total requirement of the bitumenous mix has been worked out as 50,000 tonnes approximately per annum. The existing machinery such as trucks, tippers, road rollers etc. which have outlived their lives, shall also be replaced and further supplemented. To procure the T&P as aforesaid an outlay of Rs. 150 lacs is approved for the VIII Five Year Plan 1992-97 and Rs. 30 lacs for Annual Plan 1992-93.

2. Strengthening and Resurfacing of roads in N.D.M.C. Area—(Rs. 800 lacs)

Due to increase in traffic and cutting of roads by various agencies, leakages and various other factors, it is imperative to strengthen and resurface the roads. The schemes for resurfacing are either referred to CRRI/other competent authorities from time to time for getting their recommendations for resurfacing of roads. It is further ensured that a minimum period of five years is kept before resurfacing of any road is done. Existing footpaths which are integral part of the road are also to be strengthened under this scheme. This scheme also includes works to be executed for the improvement of the road lightening system. This is a continuous process and will continue during the 8th Plan period. Some of the schemes taken up during last year are yet to be completed. Similarly new works are also to be taken up. The approved outlay of Rs. 250 lacs in the Annual Plan 1992-93 would be spent. An outlay of Rs. 800 lacs is approved for the 8th Plan 1992-97. In view of the reduced outlay for the scheme in the 8th Five Year Plan it is proposed to prioritise the schemes to be taken up during the 8th Five Year Plan.

Roads proposed for strengthening in 1992-93 and succeeding years are :—

1. Panchsheel Marg
 2. Golf Course Road
 4. Jor Bagh Road
 4. Humayun Road
 5. Prithvi Raj Road
 6. Vinay Marg
 7. Panchsheel Marg
 8. Krishna Menon Marg
 9. Tuglak Road
 10. Market Road
 11. Roads in DIZ area
 12. Other colony roads in Nataji Nagar, Kaka Nagar, Bapa Nagar, Lodhi Colony, Lakshmi Bai Nagar etc.
3. *Construction of Parking lots in Metropolitan City centre, N. D. M. C. area— (Rs. 80 lacs)*

The area of N.D.M.C. attracts a number of people for the purpose of business, shopping and recreation. As such they require adequate parking for their vehicles while attending their works. The parking lots are to be provided/improved in Connaught Place Area, and various market places like Sarojini Nagar, Netaji Nagar, Kidwai Nagar, Khan Market, P. Raj Market, Bangali Market and Gole Market etc. Bus que Shelters/recess shall also be provided. An outlay of Rs. 10 lacs for 1992-93 is approved. Rs. 80.00 lacs are approved for the programme during the VIII Five Year Plan 1992-97.

4. *Widening of Shanti Path between Diplomatic Enclave—(Rs. 15 lacs)*

This is a part of VVIP Road providing alternative road from Rashtrapati Bhawan to Indira Gandhi International Airport. It also connects South Delhi with Central Secretariate etc. There is a very heavy rush specially during peak hours. It is proposed to widen and strengthen the existing carriageway and to provide walkways on either side for pedestrians. Accordingly, an estimate of Rs. 111.30 lacs is approved by the Committee. The scheme is being implemented in phases. An outlay of Rs. 15 lacs is approved for the VIII Five Year Plan 1992-97 including Rs. 5 lacs in the Annual Plan 1992-93.

5. *Construction of subways in N.D.M.C. area—(Rs. 920 lacs)*

On account of increase in traffic volume including pedestrians, need to segregate pedestrian traffic was felt. Accordingly, a traffic study was conducted by M/s NATPAC who recommended construction of subways at 20 locations. Work on the following subways were completed :—

1. B.K.S. Marg (Ram Manohar Lohia Hospital) completed on 1-1-87
2. Aurobindo Marg 1987
3. Ashoka Road 1987

4. Mandir Marg	1987
5. Sansad Marg	1989
6. Janpath	1991

The work on the following two subways is in progress :—

1. Baba Kharak Singh Marg X-ing with outer Circle Connaught Place.
2. Kasturba Gandhi Marg X-ing with outer circle Connaught Place.

In addition to the subways recommended by M/s NATPAC the necessity of providing pedestrians corridors from Barakhamba Road to Janpath linking proposed multitier parking behind Hindustan Times Building and pedestrian subway at Tolstoy Marg and Baba Kharak Singh Marg has been experienced. In view of this it is proposed to take up construction of the following 10 Sub-ways in the 8th Five Year Plan :

- (a) Two sub-ways on pedestrian corridors linking Barakhamba Road with Janpath.
- (b) Three sub-ways at Baba Kharak Singh Marg.
- (c) One multitier crossing at Tolstoy Marg with Barakhamba Road.
- (d) One at Aurobindo Marg opposite Medical Institute.
- (f) One at Africa Avenue.

It is proposed to complete two sub-ways in each year. The total estimated cost for 10 sub-ways would be Rs. 10 crore.

An outlay of 920 lacs is approved for the VIII Five Year Plan 1992-97 and Rs. 150.00 lacs in the Annual Plan 1992-93.

The following is the list of completed proposed pedestrian subways in NDMC Area :

- | | |
|---|---|
| 1. Baba Kharak Singh Marg
(Completed) | (Connecting Ram Manohar Lohia Hospital with Nurses Hostel). |
| 2. Ashoka Road (Completed) | (Opposite Gurudwara Bangla Sahib) |
| 3. Aurobindo Marg (Completed) | (I.N.A. Market) |
| 4. Mandir Marg (Completed) | (Opposite Laxmi Narain Temple) |
| 5. Church Road | (Central Sectt.) |
| 6. Baba Kharak Singh Marg | (with outer circle) |
| 7. Sansad Marg (Completed) | do |
| 8. Panchkuian Road | do |
| 9. Janpath (Completed) | do |
| 10. Kasturba Gandhi Marg | do |
| 11. Bara Khamba Road | do |
| 12. Minto Road | do |
| 13. Intersection of Inner circle with Radial Road No. 4, 5 and 6. | |
| 14. Intersection of Inner circle with Radial Road No. 1 to 8. | |
| 15. Africa Avenue | (Near S.N. Depot) |
| 16. Pant Avenue | (Central Sectt.) |

17. Tilak Marg
18. Park Street
19. Aurobindo Marg (Connecting A.I.I.M.S. with Safdarjung Hospital)
20. Sikandra Road

6. *Widening Improvement of other roads including Radials, in Connaught Place area—(Rs. 100 lacs.)*

Various improvement works to decongest traffic/to take care of increasing traffic in Connaught Place are likely to be taken up for which number of estimates such as improvement to intersections, Railings, walk-ways, strengthening of water bays etc. have been approved/under finalisation. An outlay of Rs. 100.00 lacs is approved in the 8th Five Year Plan 1992-97 for these works including Rs. 20 lacs in 1992-93.

7. *Widening of other roads—(Rs. 300 lacs)*

With the increase of traffic on major roads and in the colonies it has become essential to carry out improvements on roads, footpaths etc. It is proposed to carry out improvement/widening of roads and intersection namely Krishna Menon Marg, Tughlak Road, C-Avenue, Part of R.K. Ashram Marg, Mandir Marg and roads lanes in Netaji Nagar, Moti Bagh, DIZ area and other roads and colonies in NDMC area. The intersection of Sansad Marg with Janter Manter Road is also required to be improved to meet increased traffic in this area. It is also proposed to improve/strengthen footpaths and intersections on the main roads as well as in the colonies as footpaths from an integral part of the road structure. A sum of Rs. 300.00 lacs is approved in the 8th Five Year Plan including Rs. 100 lacs in the Annual Plan 1992-93.

8. *Construction of Ducts for various services in N. D. M. C. Area—(Rs. 40.00 lacs)*

To avoid frequent cutting and thereby reducing the huge cost of restoration of roads, it is proposed to have duct-system on all the important and major roads/area in a scientific manner. These ducts will cater to the needs of various departments like D. E. S. U. etc. A sum of Rs. 2.00 lacs is proposed for 1992-93. A sum of Rs. 40.00 lacs is approved in the 8th Five Year Plan 1992-97 including Rs. 2 lacs for 1992-93.

9. *Setting up of New Casting Yard—(Rs. 15 lacs)*

In the discussion at various levels in the office of L. G., Delhi Administration and other organisations of Delhi Admn. it was felt that the specifications of footpaths, kerbstone, manhole covers and central verge etc. be standardised. It has also been felt that as far as possible pre-cast RCC/CC units should be manufactured departmentally in central workshop as per standard design section. The quality of footpath with RCC slabs has been appreciated at various levels and as such it is proposed to enlarge the scope of prefab units. It is also proposed to have more mechanisation in NDMC workshop by procuring various machinery equipments such as Automatic mould machines, steam curing etc. For 8th Five Year Plan an outlay of Rs. 15.00 lacs is approved including Rs. 5 lacs in the Annual Plan 1992-93.

10. *Construction of Grade Separators and Flyovers—(Rs. 50 lacs)*

It is proposed to construct grade separators under passes at the intersections of Tilak Marg, Bhagwan Dass Road and Park Street near Doctor Ram Manohar Lohia Hospital. These intersections are presently being controlled by light signals but situations has now reached when grade separators and underpasses are the only way to ensure safety of the commuters. The proposals are now with D. D. A. for clearance. A token sum of Rs. 10.00 lacs is approved in 1992-93. The 8th Plan approved outlay for the scheme is Rs. 50 lacs.

11. *Widening and improvement of Tolstoy Marg, Janter Manter Road and Ashoka Road—(Rs. 27 lacs)*

It is proposed to widen Tolstoy Marg between Barakhamba and Janpath to 100 R/W initially and ultimately to 120 ft. R/W. All the crossings and the reach, between Janpath and Atul Grove Lane have already been widened.

Land for 100 ft. R/W has been made available now by Delhi Administration by acquiring the same from private properties at a cost of Rs. 730.00 lacs. A sum of Rs. 200 lacs has already been deposited with L & B Deptt. and balance amount of Rs. 530.00 lacs is to be deposited with L&B Deptt. A sum of Rs. 20 lacs is likely to be incurred on widening of road to 100 R/W during 1992-93 subsequently Land may be acquired to 120 ft. R/W and Road will be widened accordingly. Total expenditure on this scheme is likely to be Rs. 2000 lacs.

There is a provision of widening of Tolstoy Marg to 100 ft. In one of the meetings chaired by Chief Secretary, Delhi it was decided to widen Tolstoy Marg to 120 ft. right of way. Subsequently Committee vide its Reso. No. 33 dated 27-3-92 decided that in the first instance the land may be acquired through L & B Department for 100 ft. right of way and road may be widened accordingly. In the second phase the land may be acquired for 120 ft. right of way and road be widened. A sum of Rs. 200.00 lacs was deposited with L & B Department during 1990-91. The land has since been acquired for 100 ft. right of way except in two portions where property owners have brought Stay Orders from the Court. The Land Acquisition Collector informed that the award has been published for this acquired land at a total cost of Rs. 730.00 Lacs as such balance amount of Rs. 530.00 lacs is to be paid immediately, to L & B Department. A sum of Rs. 20.00 Lacs is likely to be incurred on widening of the road as such a total of Rs. 550.00 Lacs are required for this scheme in 1992-93.

The approved outlay for the scheme in the Annual Plan 1992-93 is Rs. 15 lacs only. A token provision of Rs. 27 lacs is made for this scheme in the 8th Plan. Additional amount is required for the scheme in the 8th Five Year Plan.

12. *Traffic Transportation study of traffic circulation pattern in Connaught Place and other areas—(Rs. 2 lacs)*

The traffic volume and floating poulation in N.D.M.C. area is increasing rapidly. Traffic studies are proposed and are likely to be completed in 1992-93. A provision of Rs. 2.00 lacs has been made in the 8th Plan 1992-97 and the same amount has been kept in the Annual Plan 1992-93.

13. Improvement to Roads including strengthening of Walkways—(Rs. 1 lac)

Pedestrian traffic on various roads like Brigadier Hoshiar Singh Road, Centre Road Kidwai Nagar etc. has increased tremendously in the absence of good quality walkways. The pedestrians are using the main carriageway causing bottlenecks to the smooth flow of traffic. As such it is proposed to improve and strengthen the walkways on such roads. A token provision of Rs. 1.00 lac has been made during 1992-93 which is the total provision for the 8th Five Year Plan of 1992-97.

IV. Delhi Traffic Police—(Rs. 1500 lacs)

The problem of Road Transportation has assumed new dimensions in Delhi, due to tremendous increase in mixed vehicular traffic, road users, development of new colonies and shopping centres etc.. The road users both the motorists and pedestrians have to be educated to inculcate a sense of road safety. With a view to achieve the above objective, Delhi Traffic Police had established a Road Safety Cell in 1975. Since then the Traffic Police had been educating the public so that they could make the optimum use of the road in a disciplined and orderly manner. Traffic Training Pavillion at Pragati Maidan and Traffic Training Parks at Punjabi Bagh, Baba Kharak Singh Marg and Roshanara Garden are functioning, where thousands of children visit daily. In addition, two more traffic training parks are under construction at Shastri Park, Karol Bagh and Trans-Yamuna area. Lectures, exhibitions and competitions are organised to educate the general public to teach road safety. Road Safety is also publicised through mass media i.e. AIR/TV and newspapers etc..

During the 8th Five Year Plan, an outlay of Rs. 1500 lacs has been approved for the three plan schemes of Delhi Traffic Police. However, a sum of Rs. 300 lacs has been approved for the Annual Plan 1992-93. Out of which, a sum of Rs. 175 lacs has been approved for traffic signals and blinkers, Rs. 75 lacs for Area Traffic Control and Rs. 50 lacs for Road Safety heads.

A new head of account under capital head 5054-SSI(1)(2) Installation of Traffic Signals and Blinkers was opened during the middle of 1986. It has now become the sole responsibility of Delhi Traffic Police for installation and maintenance of Traffic Light Signals/blinkers in Delhi since January, 1986.

For the 8th Five Year Plan 1992-97 an outlay of Rs. 15 crores is approved for three plan Schemes of Delhi Traffic Police. The Annual Plan 1992-93 approved outlay is Rs. 3 crores.

The Scheme-wise details are as under :—

1. Road Safety Education & Publicity Cell & Modernisation of Delhi Traffic Police—(Rs. 300 lacs)

The following are the main programmes under this scheme for the 8th Five Year Plan 1992-97 and the Annual Plan 1992-93 :—

1. Publicity through AIR/Door Darshan, Newspaper, Magazine.
2. Road Safety educations to children through school curriculum demonstration and traffic training parks.
3. Road Safety Exhibitions in schools, residential colonies etc.

4. **Traffic Training Parks :**
 - (a) **Maintenance of existing parks (2);**
 - (b) **Construction and development of traffic training parks (one each) in traffic districts (4) ;**
 - (c) **Construction of Auditorium (Partially underground) at traffic training park Punjabi Bagh.**
5. **Construction of fully equipped Traffic Training Pavilion at Pragati Maidan.**
6. **Development of library with special references of Road Safety, Accident Prevention, Traffic Engineering and Management, Traffic Control Devices, Environmental pollution due to Automobiles.**
7. **Development of Traffic Engineering Laboratory, purchase of equipments for carrying out various kinds of Traffic studies.**
8. **Purchase of articles for use in Signals Section, Art Section.**
9. **Development of screen printing centre for printing posters signages etc.**
10. **Development of offset printing for printing road safety literature etc.**
11. **Development of Computer aided design (CAD) Centre for mapping/graphics.**
12. **Purchase of sophisticated video recording unit for traffic engineering studies and for making video films.**
13. **Development of kits for imparting education on road traffic safety to school children and general members of public.**
14. **Studies on traffic/transportation/road safety by expert/renowned institutions.**
15. **Computer software for traffic engineering applications.**
16. **Preparation of road safety materials like audio visual programme like cinema slides, films, TV programme, books/booklets, posters and for news media etc.**
17. **Close circuit TV:**
 - (a) **Maintenance of existing system (Cameras).**
 - (b) **Installation of CCTV cameras to monitor traffic congested areas/bridges on river Jamuna.**
18. **Photo Section:**
 - (a) **Purchase of articles.**
 - (b) **Upgradation of colour photo processing laboratory.**
19. **Cranes :**
 - (a) **Light Cranes for towing parked vehicles (6 Nos.).**
 - (b) **One heavy duty crane for lifting loaded heavy vehicles.**

20. Purchase of Vans for mobile road safety education (6 Nos.)

21. Development of Traffic Training Institute.

To take up these programmes an outlay of Rs. 300 lacs is approved for the 8th Five Year Plan 1992-97 including Rs. 50 lacs for the Annual Plan 1992-93.

2. *Installation of Traffic Signals and Blinkers on Delhi Road—(Rs. 1050 lacs)*

Under this scheme installation of Traffic light signals and blinkers in Delhi are being undertaken to regulate vehicular and pedestrian traffic. Traffic signals are power operated traffic control devices by which traffic is warned or is directed to take some specific action.

Other programmes are traffic signal co-ordination, upgradation of traffic signals technology, corridor synchronisation and installation of pelican crossing signals to provide pedestrians with a safe method of crossing the road without excessive delay.

(a) **Corridor synchronisation**

This can be achieved by coordination of traffic signals on important traffic corridors with signal design carried out by suitable offline Computer Programmes.

(b) **Optimisation of signals at isolated intersections**

It is proposed to improve the performance of all signals at isolated intersections by improving the technique (signal controller) furniture and signal designs. Fixed time control with the help of "TRANSYT" soft ware programme is envisaged.

(c) **Pelican crossing signals**

It is proposed to install push button actuated signals on busy roads for the safety of pedestrians without causing excessive delay. It is proposed to install 120 pelican crossing signals during the 8th Five Year Plan period.

In order to supervise and co-ordinate the traffic control system, it is proposed to create one post each of Inspector Urban Traffic Control (Rs. 2000-3000) and Sub-Inspector (Rs. 1640-2900) during the plan period.

To take up the above programmes an outly of Rs. 1050 lacs is approved in the 8th Plan including Rs. 175 lacs for the Annual Plan 1992-93.

3. *Computerised Area Traffic Control System—(Rs.150 lacs)*

The Area Traffic Control system helps to maximise the capacity of Urban Road Transport net work. The whole programme of area traffic control system envisages dividing Delhi into 4 sectors viz New Delhi, South Delhi, North Delhi and West Delhi for implementation of the project. It is proposed to take up the programme in phases. The project for area traffic control system for New Delhi area envisages an estimated expenditure of Rs. 15 crores and as such the project needs the approval of EFC.

To take up the scheme during the 8th Plan, an outlay of Rs. 150 lacs is approved which includes Rs. 75 lacs for the Annual Plan 1992-93.

V. Transport Deptt.

ROAD TRANSPORT PLAN SCHEMES :

For Road Transport Development in Delhi, the Transport Department, besides its statutory functions of controlling & regulating the increasing vehicular population in Delhi, has taken up a number of plan schemes. These plan schemes are over & above the normal functions of the Department.

Rs. 1538.66 lacs was spent in the 7th Five Year Plan 1985-90. This covered expenditure on setting up of a Motor Driving Training School and Inspection pit at Burari and opening of zonal offices in other parts of Delhi.

For the 8th Five Year Plan 1992-97, the Department has now prepared a comprehensive plan envisaging an outlay of Rs. 34.00 crores. The approved outlay for the Annual Plan 1992-93 is Rs. 35.00 crores against the expenditure of Rs. 13.50 crores in the Annual Plan 1991-92.

The scheme-wise details of the programme proposed to be implemented in the 8th Five Year Plan 1992-97 & Annual Plan 1992-93 is given as under :—

1. *Setting up of Motor Driving Training School at Loni Road, Shahdara, Rural Block (Rs. 260 lacs)*

The New Motor Vehicle Act, 1938 laid emphasis on reduction of road accidents by improving driving training techniques. The Govt. of India accordingly, stressed setting up Trg. Schools in each District throughout the country. It has also been made compulsory to undergo a compulsory stipulated period of training before obtaining the necessary driving licences. To provide motor driving trg. the Tpt. Deptt; established a Govt. Motor Drg. Trg. School w.e.f. September, 1984 at Loni Road in Shahdara Rural Block of Delhi.

OBJECTIVES :

- (i) To impart training to prospective drivers on scientific lines conforming to Motor Vehicles Act and Motor Vehicles Rules.
- (ii) To reduce chances of accidents and improve discipline on road.
- (iii) To enforce opportunity for employment and self employment to rural & urban youth.
- (iv) To impart special training programme to the already trained drivers of Government Departments.
- (v) To impart training in the areas of maintenance of vehicles depending on the requirement of sponsoring agencies.
- (vi) To conduct training of drivers before issue of PSY badges.

2. This institution is based in Loni Road has a Driving Range with simulated road and traffic conditions together with facilities of lighting and signalling arrangements to provide for night driving also. The institution is providing training facilities in the following categories of vehicles :—

Sl. No.	Class of Vehicles	Duration of Trg.	Fee
			Rs.
1.	Heavy Motor Vehicle	6 Weeks	750/-
2.	Medium Motor Vehicle	6 Weeks	750/-
3.	Light Motor Vehicle/Car	4 Weeks	500/-
4.	Auto-Rickshaw	4 Weeks	300/-
5.	Scooter/Moter Cycle	4 Weeks	200/-

The institution has skilled technical experts for imparting training in safe driving to achieve skill and good driving habits to reduce pollution as well as achieve optimum mileage for spent fuel.

4. During the 7th Five Year Plan, necessary posts required for teaching driving training as well as the ministerial posts required for functioning of the school's office were created. However, keeping in view the training needs of the institution, the following posts are proposed to be created for the school :—

Sl. No.	Name of the post	No. of Posts	Pay Scale
			Rs.
1.	Mechanic	1	1400-2300
2.	Workshop Attendant	3	750-940
3.	Sweeper	1	750-940
4.	Chowkidar	2	750-940
	Total	7	

5. Most of the staff has been created and posts filled up. The institution has facilities of training vehicles. It has mini service station, certain training models, audio-visual and video supports for training. The school is functioning in a semi-pucca buildings. The main building including workshop is yet to come up. The estimates have been received and are being processed. Certain additional maintenance and training equipment are to be procured as soon as the building and workshop are built. During the 8th Five Year Plan Period the building, equipment and creation of staff would be completed. Training vehicles such as bus and other light vehicles will be purchased in 1992-93. Thus, the scheme would continue to be fully functional with Annual recurring expenditure after the 8th Five Year Plan.

6. For the procurement of training equipment and completion of capital works, an outlay of Rs. 260.00 lacs has been approved for 8th Five Year Plan 1992-97. For 1992-93, the outlay is Rs. 60.00 lacs. (Rs. 20.00 lacs under Revenue and Rs. 40.00 lacs under Capital head).

2. *Setting up of Extension Centre of Driving Training School in Burari village— (Rs. 150 lacs)*

After the introduction of the new Motor Vehicle Act, it has become mandatory for every transport vehicle driver to undergo the stipulated training in an established driving training institute. Government of India has been emphasising opening of Driving Training School in each district of the country. As such an Extension Centre, to provide driving training in rural areas in Delhi in village Burari is being set up with modern facilities.

2. Land for this Extension Centre was procured in village Burari (Alipur Rural Block) and compound wall has been constructed. It is proposed to have a complete infrastructure in the form of qualified and well trained staff, training vehicles, workshop and laboratory back up for demonstration with cut section models, maintenance facilities visual and audio-visual supports, modern training techniques viz. models and in the areas of first-aid, road safety etc.

3. It is also proposed to have a driving range with a stimulated road and traffic condition together with facilities of lighting to provide for night driving and traffic signal installations. The programme of driving training would be on all categories of transport and non-transport vehicles. The following staff structure for creation was proposed for the Extension Centre and was agreed in principle by the Administration. However, these staff shall be created and filled up during 8th Five Year Plan and Annual Plan 1992-93.

S. No.	Name of posts	No. of posts	Pay Scale
			Rs.
1.	Vice Principal	1	2200-4000
2.	Driving Instructors	3	1400-2300
3.	Mechanic-cum-driver	1	1400-2300
4.	L.D.C.	1	950-1500
5.	Head Clerk	1	1400-2300
6.	Cashier-cum-Account Clerk	1	950-1500
7.	Peon	2	750-940
8.	Chowkidar/Sweeper (3+2)	5	750-940
	Total	15	

4. In the 8th Five Year Plan 1992-97, Rs. 150.00 lacs are approved to meet the expenditure on staff & other contingencies. Cost of Capital Works like building & road range is Rs. 120.00 lacs.

For Annual Plan 1992-93, an outlay of Rs. 30.00 lacs has been approved out of which Rs. 25.00 lacs are under Capital Head.

3. *Opening of Additional Extension Centre of Driving Training School in three Rural Blocks of Mehrauli, Najafgarh and Nangloi of Delhi—(Rs. 5.00 lacs)*

1. To open Driving Training School having modern facilities to provide training for the rural and semi-urban youths for getting employment or be self-employed.

2. To meet the objective of the new Motor Vehicle Act and provide safe drivers to the Society.

Driving is the shortest way to gain employment. A suitable infrastructure is under creation for Extension Centre at Burari in Alipur Rural Block. The same infrastructure pattern shall be followed in respect of the three proposed extension centres to be set up in other rural areas of Delhi, in the 8th Five Year Plan 1992-97.

PROPOSED STAFF STRUCTURE FOR EACH EXTENSION CENTRE

S. No.	Name of post	No. of posts	Pay Scale (in Rs.)
1.	Vice Principal	1	2200-4000
2.	Driving Instructors	3	1400-2300
3.	Mechanic-cum-Driver	1	1400-2300
4.	L.D.C.	1	950-1500
5.	Head Clerk	1	1400-2300
6.	Cashier-cum-Account Clerk	1	950-1500
7.	Peons	2	750-940
8.	Chowkidars & Sweepers (3+2=5)	5	750-940
	Total	15	

Once these Extension Centres in the Rural Blocks of Mehrauli, Nangloi & Alipur are opened such institutions shall be able to train not less than 700 trainees per annum. This arrangement shall facilitate nearness to urban, semi-urban and rural population who are desirous to learn driving. It is proposed to acquire suitable lands in these areas. However, it is proposed to set up these schools only after evaluating the performance of the existing motor driving Training School at Loni Road by the Evaluation unit of the Planning Department. For the time being a token provision of Rs. 5 lacs is approved for the above scheme in the 8th Plan including Rs. 1 lac for the Annual Plan 1992-93.

4. Computerisation of Records of Transport Department—(Rs. 100.00 lacs)

Objectives :

The Transport Department, Delhi Administration, intends to computerise all its major operations of the Head Quarters and allied offices on the on-line-basis with a view to increase the overall efficiency of the Department by :

- (a) Creating a sound record management system;
- (b) Improving public orientation (eliminating public inconvenience, public harassment and discrimination);
- (c) Reducing substantially time taken in administrative and public dealing operations;

- (d) Creating a data base for undertain Research & Development activities.
- (e) Undertaking all the operation over time and space, for quick retrieval of information and for effective monitoring of the work;
- (f) Improving the Planning and monitoring activities of the Department;
- (g) Strengthening of the system of bonafide practices and indiscrimination in public dealing operations;
- (h) Improving the effectiveness and competence of the Sections, Rules and Procedures laid down in Central Motor Vehicle Act, 1988 and Rules made thereunder.

3. MAJOR OPERATIONS TO BE COMPUTERISED :

The major operations to be computerised on the on-line-basis are as follows :—

1. Registration of vehicles
2. Road tax collection
3. Motor operation relating to permits
4. Driving licencing
5. Fitness of commercial vehicles
6. Pollution Control
7. Enforcement of provisions of Motor Vehicle Act and Rules
8. Administration and accounts of Transport Department
9. Planning Activities
10. Research & Development
11. File management
12. Vigilance
13. Public Relation Operations
14. M. A. C. Ts. (Motor Accidents Claims Tribunal)
15. Activities of Motor Driving Schools.

4. PROJECT FOR COMPUTERISATION BY NIC :

The NIC has made a study of the basic requirement of the Department in respect of its computerisation programme and has submitted a proposal likely to be executed in phases.

As per the Project Report the computerisation will be undertaken in the following phases.

PHASE	ACTIVITIES
I	Registration, Issue of Permits and Road-Tax payments of commercial vehicles at Head Quarters.
II	Registration and Road Tax payments of private vehicles at Head Quarters.

- III Registration and Road Tax Payments at all Zonal Offices.
- IV Licencing activity at Head Quarters and Zonal Offices.

The major activities of fitness, enforcement, pollution control and Administration have not been mentioned which are to be included in phases also. The overall plan of the Transport Department is to execute the on-line computerisation project on turnkey basis either by the NIC or by any other professional consultants. In the final stage all the operations of Transport Department will be networked i.e. Head Quarters, Zonal Offices, Inspection Pit etc. It will be possible to retrieve information regarding any operation at any office and execute it there itself.

The following posts are proposed to be created during 8th Plan period :

S. No.	Name of the Post	No. of Posts	Pay Scale in Rs.
1.	System Analysts	1	3000-5000
2.	Dy. Director (EDP)	1	3000-4500
3.	Manager (EDP)	2	2000-3500
4.	Manager (Admn.)	1	2000-3500
5.	Programmer	2	2200-4000
6.	Asstt. Programmer	5	1640-2900
7.	System Supervisor	5	1400-2300
8.	Head Clerk	1	1400-2300
9.	U. D. C.	3	1200-2040
10.	L. D. C.	4	950-1500
11.	Store Keeper	2	750-940
12.	Peon	2	750-940
	Total	29	

To implement the scheme an outlay of Rs. 100.00 lacs is approved for the 8th Plan including Rs. 30.00 lacs for 1992-93.

5. Setting up of Road Safety and Traffic Transportation Engineering Committee and Mobile Team of Magistrates—(Rs. 50 lacs)

OBJECTIVES :—

- (i) To create awareness of road safety among all road users.
- (ii) To centralise traffic and transportation engineering planning for Delhi Administration and deliberate policies by the committee formed under the chairmanship of Chief Secretary.

- (iii) To establish a Mobile team of magistrates for prosecuting offenders of road safety regulations on the spot.

The growth of population of Delhi and the number of vehicles registered have resulted in traffic congestion and higher rate of fatal accidents. As such road safety education to the motoring community is necessary and emphasis to this effect has been made in the New Motor Vehicles Act. Therefore, enforcement of Road Safety Rules shall be imposed on Road users particularly the drivers of vehicles. A few posts were created towards promoting road safety education and certain video films were made regularly propogating through Mass Media like Doordarshan. Slogans were designed and banners were displayed during road safety week organised every year. The slogans were also printed through Post and Telegraph Department. The department has also installed a close circuit T.V. for displying a number of video films related to road safety through the network. The same service is to be extended to zonal offices and more T.V. sets and video films are to be procured for propagating road safety education.

To book the offenders of motor vehicle offences on the road, it is proposed to be create Mobile team of Magistrates. The details of posts proposed to be created during the 8th Five Year Plan/Annual Plan 1992-93 are as under :—

S. No.	Name of the Post	No. of Posts	Pay Scale in Rs.
1.	Magistrate	6	2200-4000
2.	Prosecutor	6	1400-2300
3.	Ahlmad-cum-Steno	7	1200-2040
4.	M. V. I.	1	1600-2600
5.	Driver	8	950-1500
6.	Process Server	8	750-940
	Total	36	

An outlay of Rs. 50.00 lacs is approved for 8th Five Year Plan. Provision for salaries of various posts proposed to be created and purchase of six Jeeps. The outlay approved for the Annual Plan 1992-93 is Rs. 10.00 lacs. The scheme is likely to be completed in the 8th Five Year Plan (1992-97) when the team of Mobile Magistrates with the Supporting staff will be in position.

6. *Strengthening of the Transport Department—(Rs. 475.00 lacs)*

Objectives :

- (i) To strengthen the Transport Department by setting up zonal offices in North-East, Central, South-East and West Delhi.
- (ii) To strengthen the State Transport Authority by reorganising and expanding it to control the public transport more effectively and efficiently.

- (iii) To establish a technical cell for the Inspection of vehicles of Delhi Administration.

Programmes :

Decentralisation of Transport Department—Zonal Offices

With the increase in population and motor vehicles, there is a need to decentralise the activities of registration and licencing in Delhi by opening various zonal offices in South-East, North-East, Central Delhi etc. on modern and scientific lines, especially in the new colonies like Rohini & Papankalan.

The following posts are needed for 3 zonal offices :

No.	Name of Post	No. of Posts	Pay Scale in Rs.
1.	Deputy Director	3	3000-4500
2.	Motor Licencing Officer	6	2000-3200
3.	Motor Vehicle Inspector	12	1600-2600
4.	SAS (Accountant)	3	1640-2900
5.	Head Clerk	6	1400-2500
6.	U. D. C.	21	1200-2040
7.	Steno	3	1200-2040
8.	L. D. C.	42	950-1500
9.	Peon	6	750-940
10.	Chowkidar	6	750-940
11.	Sweeper	3	750-940

Building : Capital expenditure is provided for constructing zonal offices to accommodate above personnel on functional and modern lines.

- (b) **Furniture and office equipment :** Revenue expenditure is provided for the furniture and modern office equipment for the above offices.
- (c) **Vehicles :** 1 vehicle each is needed for each zone for meeting transportation requirements.
- (d) **Communication :** A provision of 6 P&T Telephone lines is made for meeting the communication requirements for the above organisational set up.

2. State Transport Authority :

To monitor and control public transport effectively and efficiently in Delhi, the STA requires to be re-organised on modern and scientific lines. Since Delhi is geographically a contiguous area, the more rational decentralisation in respect of STA would be on functional lines. The proposed re-organised structure would render efficiency in the functioning of STA and enable it to control public transport more efficiently according to the increasing transport requirements of the metropolis.

The following posts are proposed for the State Transport Authority during the current Plan period :

S. No.	Name of Post	No. of Posts	Pay Scale in Rs.
1.	Secretary (STA)	1	3700-5000
2.	Joint Secretary (STA)	1	3000-4500
3.	Dy. Secretary (STA)	2	2000-3500
4.	Asstt. Secretary (STA)	5	2000-3200
5.	Legal Adviser	1	3000-4500
6.	Public Relation Officer	1	2000-3500
7.	Office Suptd.	1	1640-2900
8.	Head Clerk	5	1400-2300
9.	U. D. C.	20	1200-2040
10.	L. D. C.	30	950-1500
11.	Peon	10	750-940
12.	Record Keeper	10	750-940
13.	Driver	3	950-1500
Total :		90	

Provision for building, furnitruue and modern office equipment, two vehicles and four P&T telephone lines for communication are included.

B. Transportation Wing :

For management of the Public Transport (passenger vehicles) in Delhi the following posts are required :—

S. No.	Name of Post	No. of Posts	Pay Scale in Rs.
1.	General Manager	1	3000-4500
2.	Dy. General Manager	1	2000-3500
3.	Manager (Plg.)	1	2000-4000
4.	Manager (Technical)	6	2000-3500
5.	Junior Accounts Officer	1	1640-2900
6.	Head Clerk	5	1400-2300
7.	Traffic Surveyor	10	1400-2300
8.	U. D. C.	20	1200-2040
9.	L. D. C.	35	950-1500
10.	Steno	2	1200-2040
11.	Driver	10	950-1500
12.	Peon	10	750-940
Field Staff :			
13.	Route Supervisor	10	1200-2040
14.	Asstt. Route Supervisor	30	950-1500
15.	Wireless Operator	8	1200-2040
Total :		150	

C. Enforcement :

S. No.	Name of Post	No. of Posts	Pay Scale in Rs.
1.	Deputy Director	2	3000-4500
2.	Assistant Director	5	2200-4000
3.	Inspector	5	2000-3200
4.	Sub-Inspector	10	1640-2900
5.	Asstt. Sub-Inspector	20	1320-2040
6.	Head Constable	10	975-1600
7.	Constable	80	825-1200
Total :		132	

Provision for office accommodation, furniture and modern office equipment, purchase of five vehicles, 20 Motor Cycles for transportation and for communication 10 P&T telephone lines is included.

3. Secretarial Functions:

For the Secretarial functions of the Transport Department, the following posts are needed during the current plan period.

Sl. No.	Name of Post	No. of Posts	Pay Scale in Rs.
1.	Deputy Secretary	1	3000-4500
2.	Under Secretary	2	2000-3500
3.	Legal Advisor	1	3000-4500
4.	Legal Assistant	2	1640-2900
5.	Office Suptd.	1	1640-2900
6.	Head Clerk	2	1400-2300
7.	U.D.C.	5	1200-2040
8.	Steno	3	1200-2040
9.	L.D.C.	10	950-1500
10.	Peon	2	750-940
11.	Record Keeper	1	750-940
Total :		30	

Provision for office accommodations, furniture and modern office equipment, 2 vehicles and 4 P&T telephone lines is included.

TECHNICAL CELL :

A technical cell of transport engineering is proposed to be established for formulating policy guidelines in respect of Transportation of Delhi Administration. It will also look after the function relating to inspection to vehicles of Delhi Administration, authorisation of workshops and determination of repair and accessories for the vehicles of Delhi Administration and execution of other technical functions relating to the vehicles of Delhi Administration.

The following staff is required :

Sl. No.	Name of Post	No. of Posts	Pay Scale in Rs.
1.	Automobile Engineer	1	3000-4500
2.	Technical Officer	3	2000-3500
3.	Steno	1	1200-2040
4.	U.D.C.	3	1200-2040
5.	L.D.C.	6	950-1500
6.	Peon	3	750-940
7.	Record Keeper	1	750-940
Total :		18	

Provision for office accommodation, furniture and modern office equipment, 2 vehicles and for communication, 2 P&T telephone lines is made. An outlay of Rs. 475.00 lacs (including Rs. 275.00 lacs under capital head) is approved for the Eighth Five Year Plan including Rs. 94.00 lacs for 1992-93.

7. Creation of Anti-tax Evasion and Prosecution Cell—(Rs. 50.00 lacs)

OBJECTIVES :

- (i) To identify tax evasion and collect the applicable tax together with penalty.
- (ii) To centralise the activities of defending the Government in various courts of Law.
 1. The Transport Deptt. is administering the Delhi Motor Vehicle Taxation Act, 1962 and 1989 towards recovery of tax and other revenues to the Government Exchequer. Therefore, it is important to identify tax evasion and collect the same together with penalty and also to book the offender. It has been observed that a large number of

vehicle owners do not pay the Road Tax. In the absence of any tax checking squad, the evasion has increased over the years. Therefore it calls for suitable staff, who would check the Road Tax payment and then book the offenders on the road itself. Further, challan cases sent to the courts need to be defended properly. Accordingly, under the Prosecution Cell, the department proposes to centralise the activities of defending the Government in various Courts of Law where cases are pending as well as now being registered after the introduction of new Motor Vehicle Act.

2. The Motor Vehicles Act authorises the Enforcement Staff to check whether a motor vehicle has been or is used in contravention of provision of the Act. For this activity, staff of 66 persons of Inspectors/Sub-Inspectors/Head Constables/Constables were sanctioned in 1989-90. However, further infrastructure will be created in 1992-93.

To check tax evasion and prosecution in the Court of Law, their regular monitoring and follow up is necessary. To follow up the cases in the Courts of Law, the following staff structure is proposed to be created in the 8th Five Year Plan 1992-97 and Annual Plan 1992-93 :—

S. No.	Name of the Post	No. of Posts	Pay Scale in Rs.
1.	Enforcement Officer	1	2000-3200
2.	Enforcement Inspector	3	1640-2900
3.	Sub-Inspector	10	1200-2040
4.	Asstt. Sub-Inspector	20	950-1500
5.	Head Constables	30	950-1500
6.	Constables	60	750-940
Total :		124	

For the mobility of the above staff for carrying out the enforcement duties on the road, it is proposed to procure 50 Motorcycles in the 8th Five Year Plan period 1992-97. In 1992-93, it is proposed to procure 15 Motorcycles only for which, necessary funds are made in the Plan. The following posts are needed for Legal Cell :—

LEGAL CELL :

S. No.	Name of the Post	No. of Posts	Pay Scale in Rs.
1.	Law Officer	1	2000-3500
2.	Legal Assistant	2	1640-2900
3.	U.D.C.	5	1200-2040

For implementation of this Scheme, Outlay approved for 1992-97 is Rs. 50.00 lacs and for Annual Plan 1992-93 is Rs. 10.00 lacs.

8. *Mass Rapid Transit System for Delhi—(Rs. 100 lacs)*

The scheme aims at to identify and provide a suitable Mass Rapid Transit System for commuters of Delhi supplementing the road transportation network. Unlike the Metropolitan Cities like Bombay, Madras and Calcutta, Delhi has no Mass Rapid Transit System for its commuters, with the result that the citizens are dependent solely on DTC bus operation supported by Contract Carriage Buses. But still they are unable to cater to even 50% of the population. This has resulted in personalised, mode of transportation in the form of two wheeler and four wheelers. There has been a phenomenal growth of personal motor transportation in the past decade. There has been hue and cry in respect of the exhaust pollution caused by these petrol driven vehicles particularly in the form of dangerous carbon monoxide, unburnt hydro carbon oxide of nitrogen which will lead to various health hazards, and damages to plants, animal life and engineering materials. The projected population of Delhi for 2001 AD by DDA under its perspective plan is estimated at 110 lacs and it is estimated to provide transportation to 55 lacs trips per day to the citizens. With the existing infrastructure of transportation, it is not possible to achieve this goal. Considering this and the need for a mass transportation system, a study has been conducted by RITES and the feasibility reports are under consideration of the Government.

The proposed mass Rapid Transport System envisages a high capacity Rail (140 kms.) Metro (27 kms.) and Bus-way (17.5 km.). For Metro (27 kms.) the East West corridor will be between Patel Nagar in West Delhi and Tilak Bridge in East Delhi (12 kms.) via Patel Road, Panchsukian Road and Bara Khamba Road. The North South corridor (15 kms.) will extend from Vishwa Vidyalaya in the North to Sewa Nagar in the South via Inter State Bus Terminal, Delhi Main Station, New Delhi Station, Connaught Place, Central Secretariate and Lodhi Estate.

Thus the proposed Integrated Multi Model Mass Rapid Transit System (IMMMRTS) will have different elements including a large portion of surface and a small portion of underground system. The scheme is proposed to be implemented in stages. A feeder bus service system has also been worked out, requirement of land for MRTS alignment have been finalised and is likely to be acquired in 1992-93. Reports for utility diversions, geo-technical investigations, financial & cost benefit analysis, tender design dedicated-bus-ways etc. are also to be prepared. For Planning, Co-ordination & operations of the Mass Rapid Transit System, it is proposed to set-up Unified Transport Authority in Delhi.

For the scheme "Mass Rapid Transport System" in Delhi an outlay of Rs. 200 crores was proposed in the 8th Five Year Plan 1992-97 and Rs. 6.50 crores in the Annual Plan 1992-93 for land acquisition, further studies and creation of unified Transport Authority. The working group of the Plg. Commission recommended the same outways proposed by the Delhi Admn. In the Annual Plan 1992-93 a provision of Rs. 26 crores is made for MRTS (Rs. 25 crores for land acquisition and Rs. 1 crore for studies). However, at the time of finalisation of the 8th Five Year Plan 1992-97 of Delhi, Advisor (SP) was of the view that till the investment decision on Delhi's MRTS project is taken by the competent authority, it is pre-mature to provide plan funds for the project in the 8th Plan 1992-97. Accordingly only token provision of Rs 1 crore is made for the scheme in the 8th Plan 1992-97 for meeting the exp. on completion of studies and acquisition of land.

MRTS is very urgently needed for Delhi. The Admn. hope that the Govt. of India will find it possible to offer funds through central sector or enlist the support of the Private Sector.

9. *Modernisation of infrastructure for certification of road worthiness of vehicles (Inspection Pit)*—(Rs. 350.00 lacs)

Objectives of the Scheme

1. To meet the procedure of inspection of vehicles.
2. To conduct inspection of transport vehicles on scientific lines using modern equipments and instruments.
3. To ensure safety aspects of the vehicles system as per Motor Vehicle Act and the rules made thereunder so as to reduce accident rate.

Under the provision of the Motor Vehicle Act, the Transport Department performs periodical inspection of transport vehicles to certifies their road worthiness as a statutory function.

During the 7th Five Year Plan the scheme was introduced to improve and modernise the inspection procedure. To fulfil the statutory requirement vested in the Department and to modernise the system of inspection, 12 acres of land was procured from the Delhi Water Supply & Sewage Disposal Undertaking of MCD at Burari in North Delhi. The total requirement for the complex consisting of inspection sheds, test track, vehicle parking bay, administrative buildings, weigh bridge location, horticulture requirement etc. was worked out and layout plan was prepared by P.W.D. at an estimated cost of Rs. 4.92 crores for executing the work. The Standing Finance Committee of Delhi Administration, cleared the Project and phase-I of the building works have already been completed. The Department is already organising inspection activity at this location while the capital activity is also going on side by side. The Department has identified modern equipments, track analysers, head lamp aligner, smoke meter (diesel vehicles), nois absorbers, exhaust gas analysers and computer for the Inspection Pit for procurement. Action has already been taken to import some of the equipments. These equipments shall be put to optimum use as the routine checking of transport vehicles is compulsory. The construction of administrative office, control room, vehicle parking lots, accounts section etc. will be taken up during the 8th Five Year Plan 1992-97 besides air conditioning of the equipment room. As the vehicular population is growing at an alarming rate, the proposed inspection unit shall saturate and therefore, it would be necessary to open additional zonal unit under the scheme for which identification of land and procurement would also be considered during the 8th Five Year Plan period. It is proposed to set up one more new Inspection Pit during the 8th Plan. Further expansion of Inspection Pit would be decided on the basis study by the Evaluation Unit of the Planning Deptt., Delhi Administration.

The following staff structure has already been agreed in principle for creation by the Standing Finance Committee. The same shall be created during 8th Five Year Plan. However, depending on the experience, and requirement, certain additional posts

to monitor and supervise the project would be needed which shall also be taken up during the 8th Five Year Plan :—

S. No.	Name of the Post	No. of Posts	Pay Scale in Rs.
1.	M.L.O./C.M.V.I.	10	2000-3200
2.	M.V.I.	20	1600-2660
3.	Mechanics	6	950-1500
4.	Chowkidar/Sweeper	6/3	750-940
5.	Senior Mechanic	2	1400-2300
6.	Field Men	6	750-940
7.	Junior Technical Asstts.	3	950-1500
8.	Gardner	6	750-940

The following additional posts would be required to execute the project :—

S. No.	Name of the Post	No. of Posts	Pay Scale in Rs.
1.	Project Director	1	3700-5000
2.	Deputy Director	1	3000-4500
3.	C.M.V.I.	1	2000-3200
4.	Stenographers	2	1200-2040
5.	Peons	2	750-940
6.	Staff Vehicle Driver	1	950-1500

In addition to the identified equipments staff vehicle would also be procured for the scheme. During the 7th Five Year Plan an expenditure of Rs. 227.44 lacs was incurred on payment of cost of land and construction work which is in progress.

The construction of the main building of Inspection Pit at Burari is in progress and would be completed during 8th Five Year Plan. An outlay of Rs. 350 lacs is approved for the 8th Five Year Plan 1992-97 including Rs. 200 lacs for the Annual Plan 1992-93.

10. *Strengthening of Research & Development Wing of the Transport Department—
(Rs. 50.00 lacs)*

OBJECTIVES :

- (i) To undertake the research and development activities relating to the Transport System of Delhi with special reference to public transport system, road planning, automobile engineering etc. Various studies will be undertaken in respect of these subjects.

- (ii) To undertake Research & Development activities relating to the Transport policy, organisation, procedures & functions of the Transport Department.
- (iii) The systematic compilation of statistical records of Transport Department and their analysis for policy and monitoring purposes.

A. RESEARCH, DEVELOPMENT AND PLANNING WING

A Research and Development Wing will be established to take up research work in respect of motor driving test, licensing, registration of vehicles, construction and engineering of vehicles transport system, control of public transport, road planning. Transport Planning; traffic management; procedural aspects of various operation of Transport Department, designing of forms used under various rules/section etc.

The Research and Development Wing, would undertake Research & Development activities relating to various operation of the Department and the Transportation system of Delhi and its planning. Various research and work studies will be conducted by the Wing. Educative process through modern audio-visual aids like video films, radio programmes on the various aspect of function and procedures of Transport Department will be undertaken by this Wing.

The following staff structure is proposed to be treated during the plan period :—

S. No.	Name of Post	No. of Posts	Pay-Scale in Rs.
1.	Advisor	1	3700-5000
2.	Dy. Director (Statistics)	1	3000-4500
3.	Asstt. Director (Statistics)	1	2200-4000
4.	Research Officer	3	1640-2900
5.	Statistical Asstt.	6	1400-2300
6.	Statistical Investigator	10	1200-2040
7.	Head Clerk	2	1400-2300
8.	U.D.C.	5	1200-2040
9.	Steno	3	1200-2040
10.	L.D.C.	15	950-1500
11.	Peon	6	750-940
12.	Operators (Duplicator, binding & lamination etc.)	4	950-1500

Further, the data-base so generated on the above areas require updation and additional allied areas require to be covered to meet the objectives of the scheme. Mostly the activity of the Statistical Branch would be to generate statistical data base and update the same periodically to enable the department to decide on future policy and implement the same. This unit when strengthened would prepare data base for taking policy decision in the Transport Department. Being a continuous activity and that additional staff proposed in the scheme have not been created yet it is proposed to continue the scheme during the 8th Plan period.

Provision for office accommodation, furniture and modern office equipment, purchase of two vehicles and for communication 4 P & T telephone lines is included in the proposal. An outlay of Rs. 50.00 lacs for the 8th Plan 1992-97 is approved including Rs. 5.00 lacs for the Annual Plan 1992-93.

11. Conduct of studies for overall Road Transport Planning —(Rs. 50.00 lacs)

Conduct of studies to assess the impact of surface transport on various aspects of transport planning and management is a continuous process. Future plans in perspective could only be formulated after analysing the present situation and projecting the requirements for the period 20-25 Years hence. The areas of studies may include all aspects of road environment transportation, their availability and the future demand and related areas with a view to provide facilities to all road users. Number of studies were conducted earlier under different schemes by various bodies. However, a centralised activity is envisaged under the scheme, so that there shall be uniformity and the studies would enable to achieve a definite target. Based on the studies, future planning of the road transport sector could be evolved. There are a number of institutions who have been in the field of research conducting studies for the Delhi Administration as they have expertise in specific areas. The institutions identified are C.R.R.I., NATPAC, I.T.I., Delhi and other Engineering Institutions.

Under the scheme few studies have been conducted and reports have also been received for future deliberation in the Administration. This scheme is, therefore, proposed to be continued in the 8th Five Year Plan 1992-97 so that the Department gets the suitable studies conducted for taking appropriate policy decisions in the transportation field in Delhi. A total amount of Rs. 50.00 lacs is approved for the 8th Five Year Plan Period, including Rs. 10.00 lacs for the Annual Plan 1992-93.

12. Decongestion & Rationalisation of I.S.B.Ts. in Delhi—(Rs. 800 lacs)

The carrying capacity of single I.S.B.T. at Kashmere Gate in Delhi has already reached the saturation point and specially it is not possible to expand it further to accommodate the increasing Inter-State Traffic.

The 2nd I.S.B.T. at Sarai Kale Khan—(Rs. 400 lacs)

The second I.S.B.T. with the capacity of 1500 buses is proposed at Sarai Kale Khan. The conceptual plan has been prepared. The work of earth filling and construction of boundary wall is in progress.

The following posts are proposed to be created during the plan period for 2nd I.S.B.T. :—

Sl. No.	Posts to be created	No. of Posts	Pay-scale in Rs.
General Administration			
1.	General Manager	1	3700-5000
2.	Dy. General Manager	2	3000-4500

3. Manager (Plg.)	1	2200-4000
4. Dy. Manager	2	2000-3200
5. Asstt. Manager	3	1640-2900
6. Office Supdt.	2	1640-2900
7. Head Clerk	2	1400-2300
8. Stenographer	3	1200-2040
9. U.D.C.	8	1200-2040
10. L.D.C.	15	950-1500
11. Peon	10	750-940
12. Gardner	3	750-940
13. Driver	4	950-1500

Technical & Enforcement Operations

1. Manager (Tech. & Enf.)	3	2200-4000
2. Dy. Manager (Tech. & Enf.)	3	2000-3200
3. Asstt. Manager (Tech. & Enf.)	3	1640-2900

Computer Operation

1. Computer Programmer	1	2000-3500
2. Asstt. Computer Programmer	3	1640-2900
3. Data Entry Operator	10	1200-2040

Sanitation

1. Sanitary Supervisor	1	1640-2900
2. Sweeper	3	750-940
3. Farash	3	750-940

Security

1. Security Officer	1	1640-2900
2. Watch Men	10	750-940

Computerisation

The following operations will be computerised :—

1. Ticket-booking.
2. Time scheduling of buses.
3. Entry-Exit of buses.
4. Administrative functions.
5. Personal Management.
6. Enforcement of Permit Conditions.

Provision for salary, sanitation, security, office furniture & office equipments, stationery, typewriter, photocopier, cyclostyling machine etc., computer Hardware, Software consultancy etc. Transport Vehicles (Two) and Communication set up (Telephones), EPABX, Wireless, Close-circuit TVs is made in the proposal. A sum of Rs. 100.00 lacs is required during 1992-93.

The 3rd I.S.B.T. at Anand Vihar —(Rs. 400 lacs)

The 3rd I.S.B.T. with a capacity of 1000 buses is proposed at Anand Vihar in East Delhi especially for buses coming from Uttar Pradesh. The preliminary plans have been prepared and the work has already started. The work is presently being executed by the DDA on behalf of Delhi Administration.

The following posts are to be created for the 3rd I.S.B.T. at Anand Vihar.

S. No.	Post	No. of Post	Pay Scale in Rs.
General Administration			
1.	General Manager	1	3000-5000
2.	Dy. General Manager	1	3000-4500
3.	Manager (Plg.)	1	2200-4000
4.	Dy. Manager	1	2000-3200
5.	Asstt. Manager	2	1640-2900
6.	Office Supdt.	1	1640-2900
7.	Head Clerk	1	1400-2300
8.	Stenographer	2	1200-2040
9.	U.D.C.	6	1200-2040
10.	L.D.C.	10	950-1500
11.	Peon	8	750-940
12.	Gardner	2	750-940
13.	Driver	2	950-1500
Technical & Enforcement Operations			
1.	Manager (Tech. & Enf.)	2	2000-3200
2.	Dy. Manager (Tech. & Enf.)	2	1640-2900
3.	Asstt. Manager (Tech. & Enf.)	2	1400-2300
Computer Operation			
1.	Computer Programmer	1	2000-3500
2.	Asstt. Computer Programmer	2	1640-2900
3.	Data Entry Operator	8	1200-2040

Sanitation

1. Sanitary Supervisor	1	1640-2900
2. Sweeper	2	750-940
3. Farash	2	750-940

Security

1. Security Officer	1	1640-2900
2. Watchmen	6	750-940

Computerisation

The following operations will be computerised :—

1. Ticket-booking.
2. Time Scheduling of buses.
3. Entry-Exit buses.
4. Administrative functions.
5. Personal Management.
6. Enforcement of Permit Conditions.

Provision for sanitation, security, office furniture, office equipments, stationery etc. Computer Hardware, Software, consultants etc. Transport Vehicles (Two) and communication set up (Telephone, EPABX, Wireless Close Circuit TVs) is made in the proposal. An amount of Rs. 150 lacs is needed for Anand Vihar ISBT at Shahdara during 1992-93.

Other I.S.B.T.'s

Besides the above three ISBT's the work relating to conceptual planning of the other I.S.B.T.'s in the West and North will be initiated during the 8th Plan Period.

Policy & Co-ordination of I.S.B.T.'s

For formulating the policy and for monitoring and co-ordination of I.S.B.T.'s in Delhi the following organisational set up is needed at the Head Quarters :—

S. No.	Post	No. of Post	Pay Scale in Rs.
1.	Chief General Manager	1	3700-5000
2.	General Manager	1	3000-4500
3.	Dy. General Manager	1	2000-3200
4.	Manager (Admn.)	1	2000-3200
5.	Manager (Tech.)	2	2000-3200
6.	Dy. Manager	4	1640-2900

7. Office Supdt.	1	1640-2900
8. Head Clerk	2	1400-2300
9. Steno	2	1200-2040
10. U.D.C.	4	1200-2040
11. L.D.C.	8	950-1500
12. Peon	5	750-940
13. Driver	2	950-1500

Provision for office accommodation for the above staff, furniture, office equipment, purchase of two vehicles and for communication 2 P&T Telephone lines is made in the proposal.

For the 8th Plan 1992-97 an outlay of Rs. 800.00 lacs (Rs. 700.00 lacs under capital head) is approved for implementation of the scheme including Rs. 230 lacs (Rs. 80 lacs for ISBT at Sarai Kale Khan and Rs. 150 lacs for ISBT at Anand Vihar) for the Annual Plan 1992-93.

13. Maintenance of National State Registers through Computerisation—(Rs.50.00 lacs)

Objectives

- (i) To maintain State Registers of Driving Licences issued by various offices of Transport Department.
- (ii) To maintain State Registers of Motor Vehicles in respect of Motor Vehicles Registered in Delhi.
- (iii) To maintain any other registers as a fall out in the implementation of the new Motor Vehicle Act, 1988.

The Motor Vehicles Act, 1988 and Central Motor Vehicles Rules made thereunder by Government of India has stipulated under section 26 & 63 and Rules 23 and 75 respectively maintenance of State Registers in respect of licences issued and renewed and motor vehicles registered in the State. It is also statutory for the Transport Department to provide printed copies of these registers referred under the Motor Vehicles Act and Central Motor Vehicles Rules to the Director. Pransport Research (Ministry of Surface Trahsport) periodically. Therefore this necessitates introduction of a fool proof system of preparing the registers with immediate effect as the Motor Vehicles Act, 1988 come into effect from 1st July, 1989 itself. There has been difficulties in maintaining the registers prepared mannually and it had its own difficulties in retrieving information about the licence holders and the vehicles registered in Delhi.

It is proposed to introduce computerisation to facilitate the Department to have foot-proof and permanent information base to achieve the objectives.

It is proposed to have separate configuration and computer system to have the data base independently for maintaining the records of both licences and motor vehicles.

This system shall also have the printing and retrieval facilities.

Provision for cost of the system and renovation of the various office premises where the system would be installed, as well as the expenditure on the establishment, is included.

Programme contents

To meet the objectives of the scheme it would require to install a computer system which would create master register in respect of licences issued in Delhi as well as the vehicles registered henceforth. The scheme would require infrastructure, computer configuration to maintain the above requirement and a staff structure to operate this system.

(a) The following staff structure is proposed for the scheme :—

Sl. No.	Name of Post	No. of Post	Pay Scale in Rs.
1.	Programmer	1	2200-4000
2.	Console Operator	2	1640-2900
3.	Data Entry Operater	6	1200-2040
4.	Class IV	2	750-940
5.	L.D.C./Typist	8	950-1500
		19	

(b) A suitable central computer system with 4 personal computers and line printer is required. Typewriter (English), Telephone & Furniture are also included.

An outlay of Rs. 50 lacs is approved for the 8th Plan 1992-97 including Rs. 10 lacs for the Annual Plan 1992-83.

14. *Licencing and Monitoring the Functions of the Motor Driving Training School Establishments—(Rs. 90 lacs)*

The main objectives of the scheme are :—

- (i) Licencing and renewal of the establishments of Motor Driving Training Schools.
- (ii) Regulation of Motor Driving Training Schools authorised to impart instructions in driving of motor vehicles.
- (iii) Motivation and development of new entrepreneurs to establish driving training schools to encourage healthy competition.
- (iv) Formulation of Training Programme for instructors involved to give a scientific approach in training techniques.

The New Motor Vehicles Act, 1988 and Central Motor Vehicles Rules, 1989 made thereunder vide section 12 and rule 24 to 31 respectively stipulate close monitoring and regulation of activities, supervision of infrastructure with respect to training equipment and instructors involved in driving training activities in each such establishment as per the provisions indicated in the abovesaid Section and Rules.

While Section 12 of Motor Vehicle Act, 1988 clearly stipulated the functions of the Licencing Regulation Authority for proper functioning of the establishments; Rules 24 to 31 of the Central Motor Vehicle Rules, 1989 specify the procedure of licencing and establishment, duration/renewal of licence, conditions to be observed by the licencees, suspension, and revocal of licence, appeal and appeal procedure, and detailed syllabus for imparting instructions.

Therefore, enforcing these regulations has become a statutory function of the Transport Deptt. The existing Technical Staff Strength is not sufficient to perform these functions as they are fully involved in day to day matters related to registration and issue of driving licences.

The proposed set up would execute statutory functions envisaged in the Motor Vehicles Act, 1988 so that the driving training imparted, shall have the quality as well as be on scientific lines keeping road safety aspect as the most important part of the training.

Programme contents

To meet the objective envisaged in the scheme, it is proposed to create a Secretariate exclusively under the supervision of a senior technical hand to be designated as Joint Director. Entire activity will be the sole responsibility of the Cell so that all driving training schools existing and to come up would follow the uniform norms prescribed under the Motor Vehicle Act and related rules. The Act envisages entrepreneurship development in conducting training and therefore, new driving training schools are also likely to develop and seek permission to conduct such training. The following staff structure is proposed.

S. No.	Name of the Post	No. of Post	Pay Scale in Rs.
1.	Joint Director	1	3000-5000
2.	Dy. Director (Tech.)	1	3000-4500
3.	Licencing Officer (Tech.)	2	2000-3200
4.	Inspector (Tech.)	4	1640-2900
5.	Stenographer	2	1200-2040
6.	U.D.C.	1	1200-2040
7.	L.D.C.	4	950-1500
8.	Class-IV	4	750-940
9.	Driver	3	950-1500
10.	Sweeper	1	750-940
Total		23	

The office requirements will include furniture, telephones (4 Nos.), typewriter (6 Nos.) and vehicles for inspection (2 Nos.)

For meeting expenditure on staff salary & other office equipment/contingencies, an outlay of Rs. 90.00 lacs has been approved for this scheme in the 8th Plan 1992-97. The outlay approved for 1992-93 is Rs. 10.00 lacs.

15. *Authorisation and Monitoring of Garages for the conduct of inspection and issuance of Certificate of fitness to Vehicles—(Rs. 30.00 lacs)*

Objectives of the Scheme

- (i) To encourage experienced entrepreneurs to establish testing station for issuing certificate of fitness.
- (ii) To ease the pressure on the existing infrastructure.
- (iii) To improve the quality of the vehicles.

The Motor Vehicles Act, 1988 envisages authorisation of private and state owned establishments conducting the inspection and issuance of certificate of fitness to the road transport vehicles in addition to the Road Transport Authorities.

The vehicular population in Delhi has been showing a phenomenal rise and the transport vehicle population, in particular, has gone up making it unwieldy for the department to conduct effective inspection for their fitness. Though the Department is considering the implementation of a separate scheme it would become difficult for the Department to manage their population. Therefore, it would be appropriate to encourage experienced entrepreneurs to establish vehicle testing stations and obtain an authorisation from the Registering Authority to carry out same functions for issuing certificate of fitness in appropriate form prescribed by the Government which would be valid throughout India.

Such testing stations could be private or state owned. Some entrepreneurs have already approached the Government for such authorisation.

This scheme would ease out the pressure on the existing infrastructure. The officials apart from their routine statutory activities, can also conduct surprise inspections of such vehicles certified by the authorised testing stations apart from monitoring their performance. It could also be possible to limit the authorisation of testing stations for specific vehicles and for specific purposes like issuance of periodic certificates in regard to exhaust pollution standards.

The following staff structure is required to implement the scheme.

S. No.	Name of the Post	No. of Post	Pay Scale in Rs.
1.	Joint Director (Technical)	1	3000-5000
2.	Licensing Authority	1	2000-3200
3.	M.V.I.	5	1640-2900

4.	Stenographer	1	1200-2040
5.	U.D.C.	2	1200-2040
6.	L.D.C.	1	950-1500
7.	Peon	2	750-940
8.	Sweeper	1	750-940

Total : 14

An outlay of Rs. 30.00 lacs is approved for the 8th Five Year Plan including Rs. 5 lacs for 1992-93

16. *Setting up of Wireless Communication Network and Enforcement Patrolling—*
(Rs. 90.00 lacs)

Objectives of the Scheme :

- (i) To maintain order-lieness on the road in respect of both transport and non-transport vehicles.
- (ii) To have a dedicated system of enforcement.
- (iii) To have quicker disposal of cases.

The department envisages growth in vehicular population at phenomenal rate during the plan period. This small add severe responsibility on the Department to maintain order lieness on the road in respect of both transport and non-transport vehicles. The statutory requirement expected from the department in enforcing and taking strict measures against the offenders could be achieved only through a proper and dedicated system of enforcement.

It is proposed to establish a wireless communication network between a central control room in the department and the mobile patrol enforcement squads. The squads would be deployed at various entry points to the city and also on various roads. This arrangement shall enable the department to book the offenders of provisions of Motor Vehicle Act in the shortest possible time and also maintain proper control on habitual offenders. This arrangement shall also enable the department to take follow up measure in various courts to achieve quicker disposal of cases.

Main Control Room will be set up at Burari. A control room will be set up in each zone and at Head Quarters and all the control rooms will be net-worked on wireless. The enforcement operations will be conducted from the Main Control Room at Burari.

To meet the objectives of the scheme it would require to install wireless communication system alongwith portable sets for mobile vehicles and senior officials.

The following posts are required.

S. No.	Name of the Post	No. of Post	Pay Scale in Rs.
1.	Control Room Officer	2	2000-3500
2.	Control Room Supervisors	7	2000-3200
3.	Wireless Control Operators	10	1400-2300
4.	Instrument Mechanic	2	1400-2300
5.	Wireless Operator-cum-Driver	20	950-1500
6.	Peons/Attendants	7	750-940
7.	Despatch Rider	7	750-940
8.	Sweeper	2	750-940
9.	Chowkidar	5	750-940
Total :		62	

Provision for cost of equipment, office premises where the system would be installed and the expenditure on the establishment is made in the plan. An outlay of Rs. 90.00 lacs is approved for the 8th Plan 1992-97 including Rs. 10.00 lacs for the Annual Plan 1992-93.

17. *Mechanisation of accounting procedure related to fee & tax collection—
(Rs. 75.00 lacs.)*

Objectives of the Scheme :

- (i) To have a fool-proof mechanised accounting system.
- (ii) To avoid identification problems.
- (iii) To avoid loss & pilferage.

The Transport Deptt. collects road tax and various fees related to licensing, registration, permits etc. under Delhi Motor Vehicle Taxation Act, 1962. After the introduction of the Motor Vehicle Act, 1988 and Central Motor Vehicles Rules made there under, fee structure has been revised. The collection crossed Rs. 40.00 crores in 1990-91. The system so far followed for collecting the fee, tax etc. has been done by issuing manual receipts. This system of manual operations has its own discrepancies and difficulties and even had led to loss, pilferage and availability of replicas outside the premises leading to criminal cases. At times, this has resulted in identification problems in original cases of applicants. The manual operation is considered as non-fool-proof system giving rise to avoidable complaints from the motorists. A sincere attempt was made by operating one or two mechanised system during 1989-90 road tax collection programme. The trial had been fruitful and the department is now considering total mechanisation of the procedure of accounting of both revenue collection & expenditure incurred by the department. This will enable the deptt. to improve the accounting procedure & also to achieve a near fool-proof system. Mechanisation shall also take care of the revenue expenditure incurred by the deptt. for salary & other

contingencies. The system will be made compatible by giving training to the existing ministerial staff & therefore, the infrastructure would require equipment backup & certain technical staff for preparing softwares from time to time.

The software will be so developed to be compatible with the existing computer facility in the department.

The total cost of the project consisting of modification of counters, electrical connections with uninterrupted power supply, dedicated computer system having built in tax and fee structure software to handle single door operation and proposed staff created under the scheme is estimated Rs. 85.00 lacs.

Under the scheme the following staff structure is envisaged :—

S. No.	Name of the Post	No. of Post	Pay scale in Rs.
1	Deputy Controller of Accounts	1	3000-4500
2.	Accounts Officer (Revenue)	2	2300-3500
3.	Computer Supervisor	5	1640-2400
4.	Counter Computer Operator	12	1200-2040
5.	Stenographer	1	1200-2040
6.	Store Keeper	1	1200-2040
7.	Driver	4	950-1500
8.	Class-IV	5	750-940
Total :		31	

4 separate cash vans are proposed to be purchased for this scheme.

An outlay of Rs. 75.00 lacs is approved for 1992-97 including Rs. 10.00 lacs under capital head. During 1992-93, an outlay of Rs. 15.00 lacs is approved.

18. *Improvement in storage & retrieval of permanent records—(Rs. 75.00 lacs)*

Objectives of the Scheme :

- (i) To retrieve the records/information at faster rate through computerised process.
- (ii) To maintain & update the records on modern lines.
- (iii) To help the enforcing agencies during legal proceedings.
- (iv) To preserve the records on microfilms for longer period.

The Transport Department has permanent records for more than 20 lacs of vehicles on date in the form of files as permanent records of each vehicle registered in Delhi.

As per the Motor Vehicle Act, for various transactions, the permanent records has to be retrieved and updated whenever activities are involved like transfer of ownership, inclusion/exclusion of hypothecation, transfer of permits, re-registration and submission of permanent records during legal cases at the courts etc. This results in multiple handling of files and this bringing complaints of missing records.

The existing system of maintenance has its drawbacks and therefore, to avoid repeated approach to the permanent records and also to facilitate easy retrieval of information without repeated handling, it is proposed to improve the system by introducing microfilming techniques and cataloguing system by suitably improving the environment.

The total cost of the project consisting of salary to staff to be created, equipments the modifications to be made in the buildings to install the system and for proper furnishing is estimated at Rs. 100.00 lacs. It is also proposed to complete the project during the 8th Plan period.

Equipment like microfilm readers/printers, high speed desk top 16mm Rotary Microfilm Camera (for off-line archival record management). Retrieval stations compatible to the existing Digitscan GDS-800 (for on-line retrieval), microfilm duplicator, one plain paper photocopier, necessary accessories and furniture are required to implement the scheme.

The following posts are required;

S. No.	Name of the Post	No. of Post	Pay Scale in ₹s.
1.	Manager (Records)	1	2200-4000
2.	Reprographic Officer	2	1640-2900
3.	System Operator	4	1200-2040
4.	Record Keepers	5	750-940
5.	Peons	2	750-940
Total :		14	

The entire records related to all the vehicles shall be microfilmed for on-line and off-line retrieval and storage purposes.

An outlay of Rs. 75 lacs is approved for the 8th Five Year Plan including Rs. 10 lacs for the Annual Plan 1992-93.

19. *Introduction of Digitalised Computerised Counterfeit Proof Driving Licence (Rs. 150 lacs)*

Objectives of the Scheme :

To produce digitalised computerised counterfeit proof licences, permits, master passes, speed passes, P. S. V. Badges etc. for

- (i) Eliminating forgery.
- (ii) Quick retrieval of information.
- (iii) Fool proof storage of records.
- (iv) Helping enforcing agencies.
- (v) Convenience to the vehicle owners & licence holders etc.

The New Motor Vehicles Act has a provision for issuing driving licences on a laminated card under Form 7. The Department is at present, organising issue of tamper-proof driving licences through Delhi Energy Development Agency, under the title 'Poloroid' which is a tamper-proof one and has facility of lamination.

The life of the poloroid form of licence is around 5 years only and by that time the licence starts fading and defacing. In some cases weather effect leads to difficulty in identification of licence holder and his particulars.

The New Motor Vehicles Act provides for validity of licence for a period of 20 years or upto the age of 40 years. In case of non-transport licence holders, this form of poloroid licence is likely to cause difficulties for the holder as well as for the enforcing agencies. Therefore, the digitalised engraved I.D. Card counterfeit proof system having the provisions of bar-coding and magnetic strip is proposed for producing Master Passes, Speed Passes, Permits, P.S.V. Badges, Motor Driving Licences etc.

The following staff structure is envisaged for the scheme :—

S. No.	Name fo the Post	No. of Post	Pay Scale (in Rs)
1.	Manager (Systems)	1	2200-4000
2.	Supervisor	7	2000-3200
3.	Systems Operator	7	1640-2900
4.	Operation Assistant	7	1200-2040
5.	L.D.C.	7	950-1500
6.	Peon	7	750-940
7.	Record Keeper	7	750-940
8.	Store Keeper	1	750-940
	Total	<u>44</u>	

The total cost of the scheme would be Rs. 400.00 lacs which would meet the expenditure of purchasing the equipment and other office expenses.

To meet the objectives of the scheme it would require to import equipments i. e. Hardware/Software Printer etc. In addition it would require trained manpower and suitable installation site, weather proof, at all the locations Typewriters, Telephone and furniture are also required.

An outlay of Rs. 150.00 lacs is approved for 8th Plan 1992-97 including Rs. 10.00 lacs for Annual Plan 1992-93.

20. Control of Air Pollution from the exhaust of Motor Vehicles—(Rs. 400 lacs)

Objectives of the Scheme :

- (i) To control pollution caused by motorised vehicles plying in Delhi.
- (ii) To monitor, educate & create awareness amongst the motoring public in particular and public in large on the ill effects of various pollution emitted by automobiles.
- (iii) To provide clean environment to Delhi citizens.
- (iv) To enforce safe levels of various pollutants emitted by the vehicles prescribed in the Central Motor Vehicles Rules 1989.

Exhaust of motor vehicles is one of the major sources of atmospheric pollution. The population of automobiles in Delhi has already crossed 18.5 lakhs mark and by the end of this decade the total population of vehicles in Delhi shall be more than 3 million. It has been estimated that as much as 50% of air pollution in Delhi is contributed by the exhaust of motor vehicles. These exhausts emissions are causing harmful effects on the health of citizens apart from causing damage to vegetation industrial products and historical monuments.

The G.O.I. has laid down specific standards under Sub-rule (2) of rule 115 of Central Motor Vehicles Rules 1989 in respect of Carbon monoxide emission levels for Petrol driven vehicles and smoke emission levels in respect of Diesel driven vehicles. Under rule 116 of Central Motor Vehicles Rules, the State Road Transport Authorities are empowered to enforce the prescribed pollution standards. The Motor Vehicle Act, 1988 stipulated stringent penalty vide section 190 for violating the standards specified under the said rule.

The Department created certain infrastructure in the form of manpower and equipment to conduct education programmes started during the 7th Plan to remain (1987). Considering the vehicular population and also vigilant towards the pollution caused by these vehicles it would be necessary and to enforce standards. Additional staff and equipment are essential. Therefore the scheme is carried over to the 8th Five Year Plan 1992-97.

Programme contents

To formulate strategy to control pollution a study was sponsored by Transport Department and conducted in two phases covering 50 traffic junctions through Indian

Institute of Technology, Delhi in 1985-86. After obtaining the recommendations of the study, the Administration launched an Education Campaign in December 1989 to create awareness amongst motorists after creating the following infrastructure :—

A. STAFF

S. No.	Name of the Post	No. of Post	Pay Scale in Rs.
1.	Pollution Level Test Inspectors	50	1640-2900
2.	Instrument Mechanic	1	1400-2300
3.	Statistical Assistant	1	1400-2300
4.	Driver	2	950-1500
	Total	54	

B. EQUIPMENTS :

S. No.	Equipments	Number
1.	Exhaust Gas Analyser	39
2.	Smoke Meter	5
3.	Petrol Vehicles (For Mobile Checking)	13
4.	Generator Sets	25
5.	Built up Buses	2
	(For dispersal of checking staff and equipment to check pollution levels effectively.)	

Initially, as a part of Education Campaign, free checking of petrol driven two, three and four wheelers was done. Subsequently, checking of diesel driven vehicles was started in 1989.

To cover the increasing number of new vehicles being registered in Delhi the Department has to enforce the standards prescribed in Central Motor Vehicles Rules, 1989 as a statutory function. For this purpose, it would be necessary to have additional infrastructure in encompassing maximum violating vehicles so as to ensure cleaner environment for the citizens of Delhi for which the following additional structure in addition to the already created posts, is required during 8th Five Year Plan:—

S. No.	Name of the Posts	No. of Posts	Pay Scale in Rs.
TECHNICAL STAFF :			
1.	Joint Director (Anti-Pollution)	1	3700-5000
2.	Senior Pollution Level Test Inspectors	20	2200-4000
3.	Pollution Level Test Inspectors	50	1640-2900

ESTABLISHMENT STAFF :

4. Office Superintendent	1	1640-2900
5. Driver (For buses)	2	1200-2040
6. Store Keeper	1	1400-2300
7. U. D. C.	2	1200-2040
8. L. D. C.	2	950-1500
9. Chowkidar	3	750-940
10. Sweeper	3	750-940
11. Attendants	6	750-940

ENFORCEMENT STAFF :

12. Constable-cum-driver	25	950-1500
13. Constables	15	950-1500

Total	<u>131</u>
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ADDITIONAL EQUIPMENT :

S. No.	Equipment	Number	Approx. total cost (Rs. in lacs)
1.	Smoke Meter	10	15.00
2.	Exhaust Gas Analyser	15	9.00
4.	Petrol Vehicles with filaments	5	22.50
5.	Van/Mini Bus	10	30.00

An outlay of Rs. 400.00 lacs is approved for the 8th Five Year Plan out of which Rs. 50.00 lacs would be under Capital head to construct suitable building at one of the sites available with the Transport Department to accommodate staff, storage & maintenance of equipment and parking of vehicles. Outlay approved for 1992-93 is Rs. 150.00 lacs.

The scheme was introduced in the beginning of 1985-86 by conducting a survey to assess the extent of Air Pollution caused by automobile exhaust in Delhi.

On the basis of the information and recommendation the infrastructure was created in 1986-87.

Stage of Implementation Scheme : -

- (a) Out of 54 posts created for the scheme, 50 posts have already been filled up.
- (b) Thirty five exhaust gas analysers and five smoke meters alongwith the supporting equipment were procured for the scheme.
- (c) 15 vehicles for mobile pollution checking activities were procured.

- (d) An education campaign was launched in December '87 to create awareness about vehicular pollution amongst the motorists particularly the petrol driven vehicles.
- (e) The Govt. of India introduced Motor Vehicles Act and Central Motor Vehicles Rules in July '89. While standards related to vehicular pollution were to be enforced from 1st October, 1989 it was further extended to be effective from 1st March '90.

The Department has started enforcing these standards.

- (f) The staff and equipment are deployed to conduct pollution checking activity on transport vehicles (both Petrol & Diesel driven) at the time of certifying road worthiness.

Target date of completion of the Project/Scheme

During 8th Five Year Plan period, the construction of building, procurement of equipments & vehicles and creation of staff would be completed. Then the scheme would continue to be functional with annual recurring expenditure after the 8th Five Year Plan Period.

IX. Science, Technology and Environment

Science and Technology (S & T) has made a phenomenal impact the world over in shaping the life style of the common man. If our nation has to really forge ahead in the coming decade, S & T must play a pivotal role in all the important sectors of economy. In order to derive maximum out put from meagre resources, S & T and the associated methodology must be brought into the main theme of economic planning in the agriculture, industrial and service sectors. To harness the potential created by science and technology for making a contribution to the objectives of modernisation and development, a new sector, known as 'Science, Technology and Environment' was incorporated in the Seventh Five Year Plan of U.T. of Delhi. In order to give greater impetus to the Science & Technology schemes/programmes, a separate department of Environment, Forest and Wild-life was created in the Delhi Administration in 1985. A State Council for Science & Technology was set up to advise and promote Science & Technology activities and oversee the implementation of various schemes/programmes under S & T sector.

Delhi Pollution Control Committee has also been set up in June, 1991 so that environmental problems of Delhi be tackled effectively and efficiently.

The position of expenditure during the 7th Plan, Annual Plans 1990-91 and 1991-92 and outlays approved for the 8th Plan and Annual Plan 1992-93 for the Science & Technology sector is summarised below :

		(Rs. in lacs)				
S. No.	Sub-Sector	7th Plan (1985-90) Exp.	Exp. 1990-91	Exp. 1991-92	App. outlay 8th Plan 1992-97	App. outlay 1992-93
1.	Science & Tech. Programme	9.82	—	0.11	30.00	5.00
2.	Environmental Programme	123.97	52.05	8.08	220.00	30.00
3.	Water Pollution Programme	0.42	—	—	—	—
Total :		134.21	52.05	8.19	250.00	35.00

Details of the various schemes included under Science, Technology and Environment sector are given below :—

(I) Nucleus Cell for Science and Technology (Rs. 20.00 lacs)

The Nucleus Cell for Science and Technology is proposed to be set up under the Development Commissioner for the formulation and implementation of plan schemes under 'Science, Technology and Environment' sector. The aims and objectives of the cell are :—

- (a) Popularisation of Science in the Union Territory of Delhi.
- (b) To develop technical know-how for the utilisation of fly-ash industrial waste, Bio-technology and linkage with the development sectors.

- (c) Transfer of technology.
- (d) Awareness and dissemination of information, and
- (e) Research and development in the field of Science & Technology.

An outlay of Rs. 20.00 lacs is approved for the implementation of this scheme during the 8th Five Year Plan (92-97). The various components of the scheme includes the creation of posts, purchase of office equipment, purchase of vehicle, organisation of seminars, publicity literature and TA/DA to non-official members of different committees constituted by Delhi Admn. During 1987-88, a sum of Rs. 0.99 lac was spent under the scheme. The following posts are proposed to be created during 1992-93 in the "Science, Technology and Environment" Sector:—

S. No.	Name of post	No. of posts	Pay-Scale
			Rs.
1.	Director	1	2000-2500 (Old Scale)
2.	Deputy Director	1	1500-2000 do
3.	Sr. Scientific Officer	1	1100-1600 do
4.	Scientific Officer	1	700-1300 do
5.	Dy. Director (Stat.)	1	3000-4500 (New Scale)
6.	Research Officer	2	1640-2900 do
7.	Stenographer	4	1200-2040 do
8.	L. D. C.	4	950-1500 do
9.	Statistical Asstt.	2	1400-2300 do
10.	Peon	4	750-940 do
11.	Driver	2	950-1500 do

A provision of Rs. 3.50 lacs is approved for this scheme in the Annual Plan 1992-93.

2. *Remote Sensing Centre (RSC) (Rs. 3.00 lacs)*

The objectives of the Schemes are as under :—

- (a) Land capability survey,
- (b) To study the phenomenon of Urbanisation and trend of growth,
- (c) To assess the losses caused by natural disasters,
- (d) Assessment of sown agricultural area,
- (e) Demarcation of waste land, saline/alkaline and water logged area,
- (f) Assessment of plantation,
- (g) It will assist other departments like traffic control, flood control, DDA Agriculture, Forest for their specific purposes,
- (h) Assessment of air pollution in various parts of city,
- (i) Assessment of area under mines and status of ridges.

Remote Sensing is a multi-disciplinary scheme which can be used for any purpose. In the meeting held on 26th Sept., 1989 under the Chairmanship of the Secretary, Indian Space Research Organisation, at Antariksh Bhawan, Bangalore, the need for setting up of a Remote Sensing Centres in every State was stressed. Remote Sensing Centres are functioning well in several states. Satellite Images with a resolution of 10 metres and more are available with N. R. S. A., Hyderabad. The cloud free data of spot and IRS-IA are also available with N. R. S. A.

Programme contents are :—

- (i) During the first stage, data will be compiled on computers.
- (ii) During the second stage, the Centre will be connected to the satellite using remote sensing technology.
- (iii) Preparation of land use capability map.
- (iv) The Centre will help different departments/agencies for assessing the land cover, losses due to natural hazards like flood, cyclones, dust storm, haze, heat and cold waves etc. and also help in urban development, traffic control and checking air pollution.
- (v) Remote Sensing data will be interpreted for different purposes.
- (vi) The Centre will also help departments like Agriculture, Forests to assess the agricultural area, waste land, saline and alkaline area, water logged area, area already covered under plantation, area to be taken for plantation, vegetable area, encroachment over agricultural land and urbanisation etc.

The scheme was included in the 7th Five Year Plan but it could not be implemented because the posts required/were not created. The tools require proper maintenance. An air conditioned room is needed for the protection of optical equipment and data.

Between 1985-86 and 1990-91, no expenditure was incurred under the scheme. Approved Outlay for 1992-93 and 1992-97 is given below :—

		(Rs. in lacs)	
Sl. No.	Item	1992-93	1992-97
1.	Salary of Staff	0.02	0.05
2.	Office Expenses	0.10	0.45
3.	Equipments etc.	0.38	2.50
Total :		0.50	3.00

Physical targets are :—Procurement of data, preparation or project and demarcation of Ridge and Bhatti Mines.

The following staff are required :—

Sl. No.	Name of the post	Pay-Scale	No. of post
1.	Senior Research Office (Remote Sensing)	Rs. 3000-4500	1
2.	Research Officer (Remote Sensing)	Rs. 2000-4000	1
3.	Research Assistant	Rs. 1400-2300	1
4.	Draftman	Rs. 1200-2040	1
5.	Stenographer	Rs. 1200-2040	1
6.	L.D.C.	Rs. 950-1500	1
7.	Jeep Driver	Rs. 950-1500	1
8.	Peon	Rs. 750-940	1
			8

(3) *Tissue Culture Nurseries—(Rs. 7.00 lacs)*

The tissue culture nursery has the following objectives :—

- (i) To multiply plant material very fast,
- (ii) to propagate uniform and true plants without any alteration,
- (iii) to perpetuate clones where viable seeds are not produced,
- (iv) To produce plants from other parts like grown-up tips, ovules, pollen, root peritrochium, hypocotyles and other organs from tissue culture.

Vegetative preparation is an essential tool for raising uniform plants. In certain plants uniform and true to type crops cannot be obtained due to certain limitations. Tissue culture techniques have been recommended by Scientists/Horticulturist for such plants.

The following staff are required in the 3th Five Year Plan for the laboratory :—

1.	Senior Scientist	1	Rs. 3000-4500
2.	Scientific Officer	2	„ 2200-4000
3.	Technical Assistant	2	„ 1400-2300
4.	L.D.C.	1	„ 950-1500
5.	U.D.C.	1	„ 1200-2040
6.	Laboratory Assistant	2	„ 950-1500
7.	Lab. Attendant	4	„ 750-940
8.	Chowkidar	1	„ 750-940
9.	Driver	1	„ 950-1500

Other Supporting Staff :

In addition to above, some staff will be required for raising of explant produced by tissue technique outside the laboratory i.e. Glass House/Shade House.

1. Horticulture Supervisor	1	Rs. 1400-2300
2. Head Mali	1	„ 950-1500
3. Beldar-cum-Mali	1	„ 750-940

For the 8th Plan, an outlay of Rs. 7.00 lacs is approved for the scheme which includes Rs. 1.00 lac for the Annual Plan 1992-93.

4. *Delhi Pollution Control Committee—(Rs. 150.00 lacs)*

The pollution scenario in Delhi has shown an alarming trend. This calls for immediate action under the various acts dealing with pollution of Water and Air etc. All the powers of CPCB (Central Pollution Control Board) in respect of U.T. of Delhi have been delegated to the Delhi Pollution Control Committee vide Gazette Notification No. 176 dated 20-3-1991 w.e.f. 1-6-91. The Committee comprises of the following members :—

1. Secretary (Env.)	Chairman
2. Director (Env.)	Member-Secretary
3. Nominee of the CPCB	Member
4. Secretary, LSG	Member

The Delhi Pollution Control Committee is also likely to be entrusted with the responsibility of a State Board under the Environmental Protection Act, 1986 and Cess Act, 1977, by the Ministry of Environment & Forests, Govt. of India.

The Delhi Pollution Control Committee is manned by the staff of Department of Environment, Delhi Admn. They have been posted under the Centre State Coordination Scheme of the Govt. of India. DPCC (Delhi Pollution Control Committee) has to survey assess and plan strategy for pollution control in U.T. of Delhi, besides performing regulatory functions in accordance with the provisions of pollution control acts. The Committee does not have adequate vehicles and laboratories to cope with the work load.

It is proposed to staff for Delhi, Pollution Control Committee during the 8th Plan period. It is proposed to monitor 17 major drains to assess pollutional load and efforts will also be made to monitor the Yamuna. Continuous and phased monitoring of air, noise and vehicular pollution levels in Delhi is also proposed to be undertaken during the 8th Five Year Plan period. Vehicles are proposed to be purchased. Efforts will be made to purchase furniture for the safe custody of records, files and books during the 8th Five Year Plan. A comprehensive mass awareness programme is also proposed to be launched by way of conducting seminars, pollution control camps, environmental educational programmes, training. It is also proposed to prepare slides and video films and bring out publications on environmental and pollution control aspects. Instruments and equipment for mass education and dissemination of information such as projector, VCR, T.V. etc. are proposed to be purchased during the Plan period.

Delhi Pollution Control Committee is presently operating from Old Civil Supply Building, Tis Hazari. The Committee does not have its own premises. A token provision of Rs. 5.00 lacs has been kept in the 8th Five Year Plan for a building for the committee. Token provisions of Rs. 5.00 lacs have also been made for staffing in view of the codal formalities required. The details of the plan outlay are as under :—

Name of the Head	8th Five Year Plan	(Rs. in lacs)
		Annual Plan 92-93
Pay & Allowances	80.00	00.50
Office equipments & Furniture	7.00	2.00
Laboratory Equipment	20.00	8.50
Vehicles	10.00	5.00
Land & Building	5.00	—
Misc. including studies	28.00	10.00
	150.00	26.00

The programmes/schemes of the Delhi Pollution Control Committee would be implemented by the Director (Environment), Delhi Admn. and supporting staff and progress thereof would be monitored by the Secretary (Env.) Delhi Administration.

(5) *Cell for Hazardous Chemicals and Accidents : (Rs. 20.00 lacs)*

It has been observed during the recent past that the environmental problems of the Union Territory of Delhi are increasing day by day and posing a big challenge to Delhi Administration. Although adequate attention is being paid towards anti-pollution measures in general, adequate attention is not being paid to the possibility of hazardous accidents such as the Bhopal gas tragedy, there are a large number of industrial units in Delhi dealing in hazardous chemicals. The recent incidents of gas leakage in M/s. Sri Ram Chemicals & Food at Sarai Rohilla have exposed our lack of preparedness.

The Labour Department of Delhi Administration is preparing a list of hazardous industries in the Union Territory of Delhi and has also been entrusted with the task of preparing an on-site and off-site action plan to meet emergencies arising out of leakages/accidents in such plants.

It is proposed to set up a Cell for Control of hazardous chemical and accidents which will enforce anti-pollution measures. This cell would provide training and advice on the minimum steps required to be taken to handle the situation arising out of gas leakage etc. This Cell would function under the overall supervision of the Director of Environment. The main objective of the Cell would be to coordinate and to train Police as well as Fire Service personnel in chemical disaster management. Adequate attention would be paid to safety plans for chemical industries and creating public awareness among citizens and particularly among the industry managers.

To begin with, seven control units will be set up at convenient locations in seven police districts which will be manned, preferably round the clock, by the staff of the Pollution Control Cell. The main functions of the Cell would be to coordinate appropriate action on receipt of complaints lodged by the general public. Efforts would be made to associate representatives of the Police Department and Fire Service Department in the control units set up in Delhi.

The staff of the proposed Cell shall be trained in disaster management and handling of chemicals etc. and will in turn, impart training to the Police and Fire Services. Stress would be laid on specialised training programmes.

The staff proposed for the seven control units is as follows :—

	Pay-Scale Rs.	No. of Posts
1. Pollution Control Officers	2000-3500	3
2. Pollution Control Inspectors	1400-2300	6
3. Statistical Investigators	1200-2040	2
4. Lower Division Clerk	950-1500	3
5. Class IV (Messengers & Peons)	750-950	3
6. Driver	950-1500	3
		44

In order to make the officials of the Cell mobile and functional round the clock, seven vehicles (one for each cell) would be provided.

The above mentioned staff is only the initial requirement for implementation of the scheme. Main Objectives of the scheme :—

1. Monitoring & Supervising the various activities under the said scheme.
2. Lodging public complaints regarding pollution/gas leakage etc. and action taken thereof.
3. To educate the manufacturing units to prepare its on-site and off-site action plan.
4. To inculcate awareness on pollution control amongst the citizens of the Capital.

An amount of Rs 20.00 lacs has been kept for the 8th Five Year Plan and Rs. ₹1.00 lac for the year 1992-93. The latter is a token provision for to recruit only few staff, seminars and workshops. The various activities vis-a-vis expenditure are as shown below :—

	Rs.
1. Salary & Wages of the Staff	0.02 lac
2. Vehicles	0.10 lac
3. Misc. incl. Seminars & Workshops	0.88 lac
	1.00 lac

The staff would be housed in the existing building of the Department of Environment, Delhi Administration, and would be monitored and controlled by the Secretary (Environment), Delhi Administration, Delhi.

6. *Environmental Awareness & other Activities (New Scheme)*—(Rs. 50.00 lacs)

Governmental action alone cannot tackle the problem of growing population and degradation of environment. Corporation of the public is indispensable for the success of the pollution control programme in Delhi. A comprehensive new scheme "Environmental Awareness & other Activities" will be taken up in the 8th Five Year Plan 1992-97. One Media Officer will be required in the pay-scale of Rs. 1640-2900 and one LDC as well as one peon will be provided.

Slides, video-film etc. will be prepared for use by TV & AIR, cinema halls, schools, colleges and other public forums. Video cassette recorder, colour TV, projector assembly and slide projector etc. will be purchased for disseminating information. Accordingly, the purposed outlay of Rs. 3 lacs in the year 1992-93 and Rs. 50.00 lacs for the plan period 1992-97 is made as hereunder :—

	(Rs. in lacs)	
	1992-93	1992-97
1. Salary	0.01	2.00
2. Equipment (TV & VCR/Projector etc.)	0.40	5.00
3. Misc. (including preparation of mass media material and newspaper publicity)	2.59	43.00
	<hr style="width: 50px; margin-left: auto; margin-right: 0;"/> 3.00	<hr style="width: 50px; margin-left: auto; margin-right: 0;"/> 50.00

The Scheme will be implemented by the Director (Environment) and the overall supervision will be provided by Secretary (Env.), Delhi Administration.

GENERAL ECONOMIC SERVICES

X. SECRETARIAT ECONOMIC SERVICES

This sector deals with the plan formulation, implementation, monitoring and evaluation of the projects and programmes being implemented in the National Capital Territory of Delhi. The Planning Deptt. is the nodal department for all plan matters for this Territory and thus entrusted with the responsibilities of formulating long term, medium term and operative Annual Plans for this Territory and to oversee the implementation of plan programmes as per schedule, monitor the progress of plan implementation, evaluate the major plan projects and plan schemes as decided by Delhi Admn. both at implementation stage and post-implementation stages.

2. Here we are discussing the plan schemes included in the 8th Five Year Plan to improve the planning system for this Territory covering all segments viz. formulation, implementation, review, mid term appraisal, evaluation, etc. by strengthening Planning Deptt. and also the Planning Cell of major deptts. which are responsible for proper utilisation of plan funds by their Subordinate offices/undertakings and co-ordination on plan matters with the Planning Deptt. As mentioned in the 8th Five Year Plan document of the Planning Commission the success of a plan lies in the effectiveness with which the projects and programmes are executed and the efficiency and productivity level at which various enterprises operate. In brief, the approach to be adopted in the 8th Five Year Plan to strengthen and improve the planning system in this territory is discussed as under :—

1. *Strengthening of Planning Deptt.—(Rs. 50 lacs)*

(i) Plan Formulation

Planning Deptt. will prepare guidelines taking into account the guidelines prepared by the Planning Commission for formulation of the Five Year Plans and Annual Plans. These guidelines will be issued to all plan implementing Deptts. and Agencies well in advance. Planning Deptt. may also undertake training programmes for the Planning Officers of different Deptts. and Agencies on this subject. This is being suggested, keeping in view the peculiar nature of plan development required for this Territory which envisages Metropolitan city planning. In such system the involvement of a number of agencies in various projects require a clear-cut approach to be adopted by all concerned agencies for the effective and scheduled implementation of major plan programmes. Efforts will be made to avoid duplication of efforts by different agencies in the same areas of development.

(ii) Plan Implementation

The implementation of the plan schemes starts with the beginning of the Annual Plan and Five Year Plan commensurate with the beginning of new financial year. For the scheduled implementation of all plan programmes, a number of preliminary steps are required to be taken in the city planning process. It requires advance action by the implementing departments in close consultation with the supporting departments/agencies. In the absence of advance action, the implementation of the programmes/projects get delayed. Planning Department, with its proposed strengthening, will be in a position to play its nodal agency role. It will review the steps taken by the plan implementing deptts. at the

right time. It will facilitate removing bottle-necks and inter-departmental problems and issues so that the implementation of the programmes start right from the first date of the operative plans. In this field the role of the Planning Deptt. needs to be expanded by making it a full and effective consultative machinery with the strengthening of its Project Appraisal and Advice Unit. The unit will suggest the preliminary steps to be taken by the concerned Deptts. after the study of the projects and their proper appraisal taking into account the monitoring and evaluation reports of similar projects already completed or in progress. The Planning Commission in its 8th Five Year Plan document has also highlighted the need for streamlining the clearance procedure. A two stage approval procedure is envisaged for the 8th Five Year Plan for all plan projects so that timely clearance may enable the implementing deptts./agencies to take timely action for land acquisition and preparation of the project feasibility reports. On completion of these preliminary steps the preparation and finalisation of the project reports will be possible within a reasonable period and funds may be provided accordingly for these projects. At present all plan programmes and projects need approval of the Finance and Planning Deptts. before their implementation starts. With the strengthening of the Planning Deptt. during the 8th Five Year Plan, the time consumed in getting clearance for the projects will be reduced to the minimum possible and its advisory role will become more effective and purposeful.

(iii) Data Bank

With the increasing responsibilities of the Planning Deptt. particularly in the new set-up for the National Capital Territory, a Data Bank will be essential for the Planning Deptt. so as to give clearance to the projects/programmes within shortest possible time, to make a critical appraisal of the projects before their inclusion in the plan, and to issue approval for the programmes/schemes before implementation. A survey & statistics unit will be set up in the Planning Deptt. which will manage the Data Bank for the Deptt.

(iv) Availability of funds—time & Cost over-runs

With the change in the system adopted by the Planning Commission in finalising the plan size for the States and U. Ts, the role of the Planning Deptt. has increased tremendously in the Planning process of this National Capital Territory. Now the funds available to each sector and scheme will have to be decided by the Planning Deptt. in consultation with the plan implementing agencies within a very short period. This procedure can be made more scientific and useful only when the Planning Deptt. is in a position to have alternatives for each scheme/programme with reference to the plan size proposed and accepted by the Planning Commission. It requires comprehensive information and analysis by the Planning Deptt. for all programmes proposed in the plan. Thus, the stages of the implementation of the plan programmes in the field as well as the stages of the new plan schemes to be implemented will have to be monitored and reviewed by the Planning Deptt. on regular basis. Only then will the Planning Deptt. be in a position to allocate the outlays for sectors and schemes in the appropriate order. Planning Commission has also suggested that the cost over-runs due to fluctuation in foreign exchange rates, changes in custom duties or price rise may be considered to be beyond the control of project implementing authorities. As such, the cost over-runs due to these factors will have to be separated and project implementing authorities may not be required to go to the Government or the approving authority for revised approval. Thus, the Planning Deptt. will have to analyse the cost over-runs for all major projects both in terms of the factors beyond the control of the

project authorities as well as factors like delay in implementations, changes in scope and quantity of work, initial under-estimation of the cost, etc. so that the issue of revised approval to the projects may be examined and decided.

During the course of the Mid-year review of the plans, certain sectors require re-allocation of funds. A full internal-Sectors exercise is to be done by the Planning Deptt. to ensure the implementation of the projects as per schedule and to utilise of plan funds in the appropriate order. All these exercises require continuous review and monitoring of plan schemes by the Planning Deptt. The proposed Monitoring and Review Unit will take care of these aspects.

(v) Evaluation

Planning Commission in its 8th Five Year Plan document suggested that evaluation studies of some selected projects which have been completed without delay and within cost as well as some projects which have suffered time and cost over-runs may be undertaken by the Evaluation Organisations of the State Governments and evaluation studies of such projects may be utilised for formulation, appraisal, planning and implementation of similar projects in future. Thus, plan formulation and implementation can be up-dated with the experience for which evaluation studies can give us a correct feed back. Planning Department will undertake evaluation studies on these lines as well as for the projects decided by the Delhi Admn. to assess the utility of the programmes in terms of their continuation and scope. Adequate staff will have to be deputed for timely completion of evaluation studies of the major projects.

(vi) Monitoring

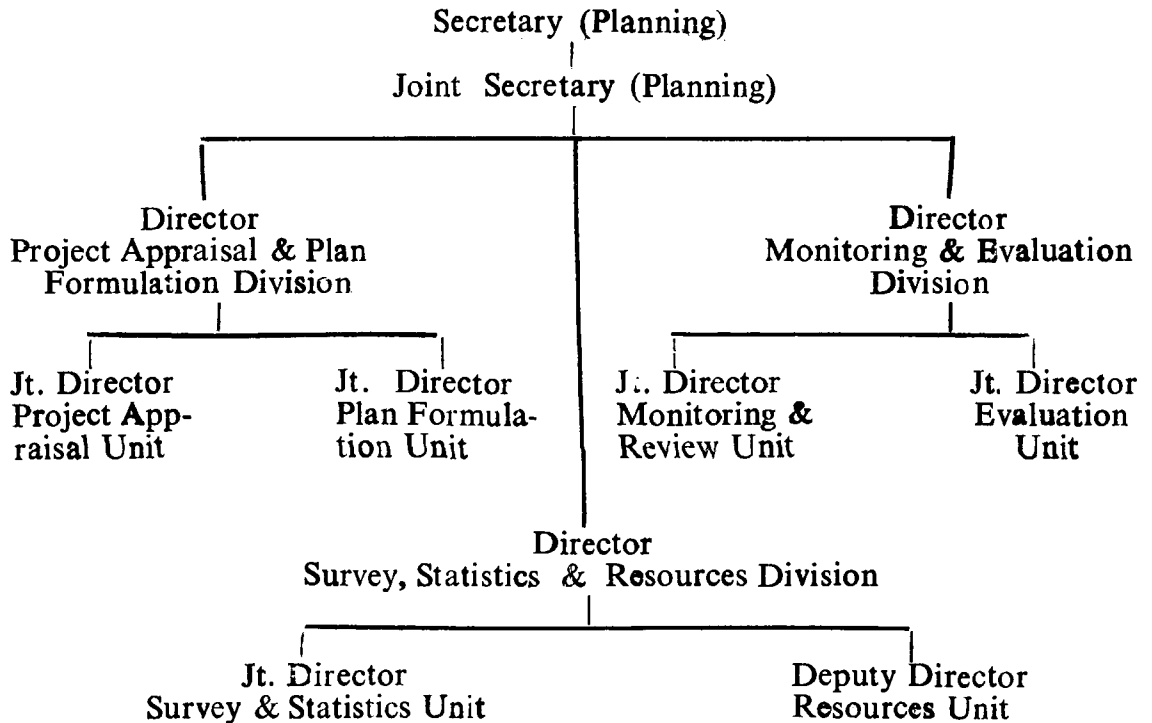
All major functions like plan formulation, implementation, project appraisal, re-allocation of funds etc. will have to be dependent on monitoring exercises by the Planning Department. During the 8th Five Year Plan, efforts will be made to evolve a system of regular flow of relevant information to make monitoring an effective tool of management action. Thus, a separate Monitoring Unit is the primary requirement for the Planning Department. This unit will make available relevant information to plan formulation unit, project appraisal unit, Data Bank and other units of the Department.

(vii) Financial Resources

Planning Commission undertakes an exercise to estimate additional resources proposed to be raised by the Delhi Admn. during the Five Year Plan and Annual Plan. On the basis of this exercise the plan size of Delhi is decided, keeping in view the National Capital Territory's special requirements. Thus, full attention is required to be paid to additional resources which can be raised to meet the plan finance of this territory. Adequate staff is required for this work during the 8th Five Year Plan as estimation of additional resources exercise will continue throughout the year by reviewing the position at regular intervals.

In the proposed set-up for the National Capital Territory of Delhi, the responsibilities of the Planning Department will increase and diversify. For Administrative purposes the territory is also going to be divided into Nine Distts. The planning process for this territory will accordingly have to be worked out according to the new set-up. The

number of public sector undertakings in the new set-up will also increase. Thus, the different units of the Planning Department will have to be created or strengthened so as to meet requirements of the new set-up. Accordingly the organisational set-up of the Deptt. will be as under : -



Statement indicating sanctioned posts upto 1991-92, proposed strength of staff in 1992-97 and 1992-93 for the Planning Department, Delhi Administration

Sl. No.	Name of the Post	Total No. of Posts sanctioned upto 1991-92	Total No. of Posts proposed at the end of Annual Plan 1992-93	Total No. of Posts at the end of 8th Plan 1992-97
1	2	3	4	5
I. Project Appraisal & Plan Formulation Division				
	1. Director (Rs. 3700-5000)	—	—	
A. Project Appraisal Unit				
	1. Joint Director (Rs. 3000-5000)	—	—	
	2. Dy. Director (Rs. 3000-4500)	—	1	

3.	Asstt. Director (Rs. 2200-4000)	—	1	3
4.	Stat. Officer (Rs. 2000-3500)	—	—	2
5.	Analyst/Research Officer (Rs. 1640-2900)	2	2	4
6.	Sr. Stenographer (Rs. 1400-2300)	1	1	1
7.	Jr. Stenographer (Rs. 1200-2040)	—	—	8
8.	L.D.C. (Rs. 950-1500)	—	—	5
9.	Driver (Rs. 950-1500)	1	1	2
10.	Peon (Rs. 750-940)	2	2	8
11.	Stat. Assistant (Rs. 1400-2300)	2	2	4
	Sub-total I 'A'	<u>8</u>	<u>10</u>	<u>40</u>

B. Plan Formulation Unit

1.	Joint Director	1	1	1
2.	Deputy Director	1	2	2
3.	Asstt. Director	3	5	5
4.	Stat. Officer	2	2	2
5.	Research Officer	6	6	6
6.	Stat. Assistant	8	8	8
7.	Stat. Investigator	3	3	3
8.	Jr. Stenographer	8	11	11
9.	L.D.C.	9	9	9
10.	Artist	1	1	1
11.	Librarian	1	1	1
12.	Despatch Rider	2	2	2
13.	Machine Operator	1	1	1
14.	Driver	1	1	3
15.	Daftri	1	1	1
16.	Peon	7	9	10
17.	Gestetner Operator	1	1	1
	Sub-total I 'B'	<u>56</u>	<u>64</u>	<u>67</u>
	G. Total I A&B	<u>64</u>	<u>74</u>	<u>108</u>

II. Survey & Statistics Division

1. Director	—	—	1
A. Survey & Stat. Unit			
1. Joint Director	—	—	1
2. Deputy Director	—	—	1
3. Stat. Officer	—	—	4
4. R.O./Analyst	—	—	4
5. Stat. Assistant	—	—	4
6. Sr. Stenographer	—	—	1
7. Jr. Stenographer	—	—	4
8. L.D.C.	—	—	4
9. Driver	—	—	1
10. Peon	—	—	6
	<hr/>	<hr/>	<hr/>
Sub-total II-A	—	—	30
	<hr/>	<hr/>	<hr/>

B. Institutional Finance & Resources Unit

1. Deputy Director	—	1	1
2. Asstt. Director	1	1	2
3. Research Officer	1	1	2
4. Stat. Assistant	1	1	4
5. Jr. Stenographer	1	2	3
6. Stat. Investigator	—	—	2
7. L.D.C.	1	1	3
8. Peon	—	—	4
	<hr/>	<hr/>	<hr/>
Sub-total II-B	5	7	21
	<hr/>	<hr/>	<hr/>
Total II A & B	5	7	52
	<hr/>	<hr/>	<hr/>

III. Monitoring & Evaluation Division

1. Director	—	—	1
A. Monitoring & Review Unit			
1. Joint Director	—	1	1
2. Deputy Director	—	—	2
3. Asstt. Director	—	2	4
	<hr/>	<hr/>	<hr/>

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4. Analyst/R.O.	2	2	6
5. Sr. Stenographer	—	—	1
6. Jr. Stenographer	—	2	7
7. L.D.C.	2	2	4
8. Driver	—	—	1
9. Peon	1	1	6
10. Asstt. Programmer (Rs. 1640-2900)	—	1	1
11. Key Punch Supervisor/Console Operator (Rs. 1400-2300)	—	1	2
12. Data Entry Operator (Rs. 1200-2040)	—	3	3
	<hr/>	<hr/>	<hr/>
Sub-total III-A	5	15	38
	<hr/>	<hr/>	<hr/>

B. Evaluation Unit

1. Joint Director	—	—	1
2. Deputy Director	2	2	2
3. Asstt. Director	2	2	4
4. R.O./Analyst	2	2	4
5. Stat. Assistant	6	6	6
6. Stat. Investigator	2	2	4
7. Jr. Stenographer	4	4	7
8. L. D. C.	2	2	4
9. Driver	1	1	1
10. Peon	3	3	6
	<hr/>	<hr/>	<hr/>
Sub-total III-B	24	24	39
	<hr/>	<hr/>	<hr/>
Total III A & B	29	39	78
	<hr/>	<hr/>	<hr/>

IV. Administration Branch

1. Administrative Officer (Rs. 2000-3500)	1	1	1
2. J. A. O. (Rs. 1640-2900)	1	1	1
3. Asstt. (Rs. 1400-2300)	3	3	3
4. U. D. C. (Rs. 1200-2040)	2	2	2
5. L. D. C./Typist (Rs. 950-1500)	4	4	5
6. Steno (Rs. 1200-2040)	—	—	1

7. Mali (Rs. 750-940)	1	1	1
8. Chowkidar/Farash/Sweeper (Rs. 750-940)	9	9	9
9. Driver (Rs. 950-1500)	1	1	1
10. Photo Copier Operator	—	—	2
Total IV	<u>22</u>	<u>22</u>	<u>26</u>
Grand Total	<u>120</u>	<u>142</u>	<u>264</u>

2. Strengthening of Manpower & Employment Unit—(Rs. 4 lacs)

The Manpower & Employment Unit was set-up in the Planning Department in the year 1980-81 on the recommendations of Planning Commission and was transferred to the Bureau of Economics & Statistics in September, 1981. This unit was declared an independent office in the year 1982. Since then, this unit is functioning as independent office and working as per guidelines being issued by the Planning Commission and Delhi Admn. from time-to-time. The main functions of this office are as follows :—

- (i) To participate in the Planning process at every stage i.e. Plan formulation, co-ordination, implementation, review and evaluation.
- (ii) To project Manpower & Employment issues i.e. Research and Analysis.
- (iii) To carry out studies in the field of Manpower & Employment as required from time-to-time.

This office has brought out the following manpower reports :—

- (1) Vocationalisation of Education in the Union Territory of Delhi—1984.
- (2) Health Professional in Delhi—An appraisal—1984.
- (3) Employment situation in Delhi—1986.
- (4) Fact Book on Manpower (Vol. I) of the U.T. of Delhi—1986.
- (5) Evaluation study on House-sites to landless labourers—1987.

Achievements during the year 1989-90, 1990-91 & 1991-92

- (i) *Fact Book (Vol. II)* : Most of the information from various Degree Colleges, Polytechnics, Degree Engineering Colleges, I.T.Is and some professional training institutions were collected personally by the field staff. Information received from institutions alongwith Medical Colleges and Education Departments has been tabulated/prepared and included in this Fact Book.

- (ii) *Manpower Profile for 7th Five Year Plan* :—The draft report has been prepared and sent to Planning Commission for their technical approval, which is still awaited.

Planning Commission has been requested to send the format for Manpower Profile for 8th Five Year Plan which is yet to be received.

- (iii) *Manpower Planning for Matriculates (Employment Exchange, Pusa)* :—Data has been tabulated. The draft report is being prepared.
- (iv) *Situation of Educated Unemployed* :—Certain data has been collected for updating the tables/report.
- (v) *Employment Norms for Construction Works* :—Data for the year 1990-91 & 1991-92 was collected and tabulated. Relevant data for the 8th Plan period i. e. 1992-97 and Annual Plan 1992-93 has been compiled and included in the document Draft 8th Plan 1992-97 and Annual Plan 1992-93.
- (vi) *Employment potential in Automobile Industry in the Union Territory of Delhi* :—Sources of Data to be collected have been identified. The format concept and design for conducting this study has been devised and is under submission for approval. The field study will be started very soon.
- (vii) *Pattern of employment and unemployment among Doctors* :—To highlight the salient features and improving the contents of the study, the report has been re-drafted again and approved by the Planning Deptt. for release.
- (viii) *Manpower Planning for Matriculates (Employment Exchange, Daryaganj)* :—The format concept and design for conducting the study has been devised and size has been worked out. The information of 1900 registered candidates has been collected, 900 questionnaires have been despatched to selected sampled candidates for furnishing the relevant detailed information, out of which information from 250 candidates have been received so far. The information in respect of the rest of the sampled candidates will be collected from Daryaganj Employment Exchange. The questionnaires will be scrutinized and data will be tabulated and finalised during the year 1992-93. The study of Employment Exchange, Shahdara will be taken up during 1992-93.
- (ix) *Number of Posts proposed/sanctioned during 7th Five Year Plan 1985-90* :—Information in respect of posts created during 7th plan (1985-90) and proposed for the period 1990-95 has been collected from all the plan implementing agencies/deptt. of Delhi Admn., local bodies i. e. N.D.M.C., M.C.D. and various autonomous bodies of Delhi Admn. The data have been compiled and tabulated and the draft report has been prepared. The report reveals that during the 7th Plan period (1985-90), 32076 posts were sanctioned out of the 41396 posts proposed,

Strengthening of Manpower & Employment Cell--7th Five Year Plan (1985-90)

For Planning Department including Manpower Deptt. of Delhi Admn., an amount of Rs. 105.50 lacs was approved for 7th Five Year Plan 1985-90 and an expenditure amounting to Rs. 9.44 lacs in respect of Manpower Employment unit was incurred. 11 posts were created out of the 14 posts proposed as per details below :

S. No.	Name of the Post	Pay-Scale (Rs.)	No. of Posts Proposed	No. of Posts Created
1.	Jt. Director	3000-5000	1	—
2.	Research Officer	1640-2900	2	2
3.	Stat. Investigator	1200-2040	2	2
4.	Stenographer	1200-2040	2	2
5.	L.D.C.	950-1500	2	1
6.	Gestetner Operator	800-1150	1	—
7.	Driver	950-1500	1	1
8.	Farash-cum-Chowkidar	750-940	1	1
9.	Peon	750-940	1	1
10.	Part-time Sweeper	200 fixed	1	1
			14	11

For the Annual Plan 1991-92, an amount of Rs. 2.00 lacs was approved for the creation of few posts which could not be created due to economy measures adopted by the Govt. of India.

8th Plan (1992-97) and Annual Plan (1992-93)

Manpower & Employment Cell will be strengthened at headquarter's level, planning level, survey level and at administrative level. Headquarter level will bring out the reports/booklet on the basis of the studies conducted by the field staff of Manpower & Employment which are useful for the policy issues in the N. C. T. of Delhi.

Planning level will take care of all the work pertaining to the preparation and formulation of five year plans and annual plans of Manpower & Employment generation projections both at draft plan formulation stage and for approved plans.

Data is to be collected from the various departments of Delhi Admn./autonomous bodies of Delhi Admn./Central Govt. offices and from the various other offices as well as from the private sectors by field staff by making personal visits so that the report/work may be completed in a time bound programme. The required data is collected by conducting field survey after discussions with the senior officers of various departments/agencies/training professionals and research institutions as well as govt. offices including local bodies. To get the data/information, the field visits are very essential and hence, the posts of statistical investigators are needed. Administrative staff is also to be strengthening for day-to-day routine work pertaining to the unit.

Keeping in view the significant role of planning for Manpower & Employment in the N. C. T. of Delhi and to carry out the functions assigned to this office, it is suggested that the office may be strengthened by creating the following posts during the 8th Five Year Plan 1992-97 :—

S. No.	Name of the Post	Pay Scale	No. of Posts
1.	Jr. Director	3000-5000	1
2.	Dy. Director	3000-4500	1
3.	Statistical Officer	2000-3500	1
4.	Stat. Asstt.	1400-2300	4
5.	Stat. Investigator	1200-2040	4
6.	L. D. C.	950-1500	2
7.	Gestetner Operator	800-1150	1
8.	Peon	750-940	3
			17

Planning Commission has provided Rs. 4.00 lacs for the 8th Five Year Plan period 1992-97 and an amount of Rs. 1.00 lac for the year 1992-93. Keeping in view the above facts the following posts are to be created during the year 1992-93 :—

S. No.	Name of the Post	Pay Scale	No. of Posts
1.	Jt. Director	3000-5000	1
2.	St. Asstt.	1400-2300	1
3.	Stat. Investigator	1200-2040	1
Total			3

3. *NCR Co-ordination & Planning Cell in Land & Building Deptt.—(Rs. 8.00 lacs)*

In order to attend to various matters related to the co-ordination of NCR matters as far as Delhi is concerned, a NCR Co-ordination & Monitoring Cell was sanctioned in the Land & Building Department, Delhi Administration on 6-11-1991 by the NCR Planning Board. Following posts are being created for this cell :—

S. No.	Name of Posts	Pay Scale Rs.	No. of Post
1	2	3	4
1.	Jt Secretary	3200-4700	1
2.	Associate Town & Country Planner	3000-4500	1
3.	Stenographer Gr. II	1400-2300	1
4.	Stenographer Gr. III	1200-2040	1
5.	Peon	750-940	1
Total			5

The Ministry of Urban Development has supported the proposal to create these posts in Delhi Administration but have asked this Administration to take-up the matter with the Ministry of Home Affairs for issue of sanction. Accordingly, Ministry of Home Affairs has been approached. The main task of the Cell with regard to monitoring and co-ordination would be in the following sectors :—

1. Inter-Departmental Co-ordination :—
 - (a) N.C.T.
 - (b) Central Ministries
2. Monitoring the progress of projects/activities undertaken by implementing agencies :
 - (a) Land acquisition and development
 - (b) Housing
 - (c) Water supply, sewage and drainage
 - (d) Environment
 - (e) Industries
 - (f) Wholesale Trade & Commerce
 - (g) Power
 - (h) Private Office Complexes
 - (i) Traffic and Transportation
3. Monitoring the progress of the tasks assigned to the NCR Planning Cell—DDA.
4. Follow-up action on issues relating to implementation of the Regional Plan :—
 - (a) Inclusion of a NCR Sub-plan in the 8th Five Year Plan on N.C.T.
 - (b) Location of Wholesale Trade Centres
 - (c) Rationalisation of Fiscal Structure

Expenditure on these posts will be reimbursed in full by the NCR Planning Board. The scheme has been included in the Annual Plan of Delhi for 1992-93 and a provision of Rs. 2.00 lacs has been made for this scheme for 1992-93 and Rs. 8.00 lacs for the 8th Five Year Plan 1992-97.

4. Strengthening of Planning Cell in LSG Deptt.—(Rs. 60 lacs)

The scheme of strengthening of Planning Cell in LSG Deptt. is being implemented w.e.f. 1st Oct., 1990. For manning this cell, 31 posts were sanctioned in July, 1990.

The LSG Deptt. was previously a part of the L & B Deptt. It started functioning independently as a separate deptt. w.e.f. 1-10-1990. The deptt. is entrusted with the job of implementing various plan schemes formulated by the local bodies namely MCD, NDMC, DESU, DWS & SDU and it involved conveying administrative approval release of funds at regular intervals, ensuring proper utilization of the funds released to local bodies, monitoring of plan progress, co-ordination work etc.

More than 50% of Delhi's plan outlay is utilized by the above said 4 local bodies. As such for proper scrutiny, monitoring, review & formulation of plan schemes, some additional posts of one Jt. Director (Planning) Rs. 3000-5000, one Dy. Director (Planning) Rs. 3000-4500, two Asstt. Directors (Plg.), 4 Statistical Asstts. and three Stenos are proposed to be created during the Eighth Five Year Plan in a phased manner. These posts, when filled, will facilitate taking up monitoring work of the local bodies more intensively so as to ensure timely completion of the plan projects and proper utilisation of the funds.

LSG Deptt. will also co-ordinate various inter-departmental issues so that these may be resolved in time and implementation of plan schemes may not be affected in the absence of timely intervention. An amount of Rs. 60 lacs has been approved for Eighth Five Year Plan (1992-97), which includes Rs. 12.00 lacs for Annual Plan 1992-93, to meet the Staff expenditure already sanctioned under the scheme and new posts proposed to be created.

5. *Strengthening of Planning & Monitoring Unit of M. C. D.—(Rs. 5.00 lacs)*

Municipal Corporation of Delhi (General Wing) is one of the major agencies for implementation of various development programmes under Plan Schemes in the N.C.T. of Delhi. Earlier, MCD was implementing schemes in the following major sectors viz :—

1. Transport
2. Primary Education
3. Medical and Public Health &
4. Housing etc.

However, with the passage of time, the scope of the schemes as well as outlays approved for various sectors has increased manifold. This is particularly so in the case of schemes included in the Housing & Urban Development Sectors including strengthening/Mechanisation of the Conservancy and Sanitation Engineering Deptt. of M.C.D.

The Govt. of India/Planning Commission/Delhi Admn. have been emphasising proper formulation, timely implementation and regular monitoring of various plan programmes repeatedly. A small P&M Cell was established in MCD during the 6th Five Year Plan to coordinate the activities of various MCD departments and was strengthened further during the 7th Five Year Plan.

In view of the increase in the scope of the schemes as well as transfer of several important projects to MCD such as those of development works in Urban Villages, Regularised/Unauthorised colonies. Resettlement colonies, Environmental improvement in J.J. Clusters and other miscellaneous schemes in the Annual Plans 1990-91 & 1991-92 and 8th Five Year Plan, the work for regular monitoring has increased manifold. It would, therefore, be essential to further strengthen the staff during the 8th Five Year Plan and also instal modern data processing equipment and procure vehicle(s) as the officers of P&M Deptt. would be required to monitor the progress of schemes/projects by site inspections of the projects in the fields regularly.

An amount of Rs. 5.00 lacs is approved for the Eighth Plan 1992-97 to meet the expenditure on the staff/and for purchase of equipment/vehicles and other contingent expenditure etc. for this scheme which includes Rs. 1 lac for Annual Plan 1992-93.

6. Strengthening of Plan & Monitoring Cell of NDMC—(Rs. 5 lacs)

NDMC is one of the major agencies for implementation of various developmental programmes under Plan in the N. C. Territory of Delhi. The major sectors covered by the NDMC are : Energy, Transport (Roads & Bridges), General Education, Medical & Public Health, Water Supply & Sanitation, Urban Development, Social Welfare, Nutrition, etc.

2. The Planning set up of NDMC is headed by the Financial Adviser who is assisted by an Accounts Officer designated as Plan & Development Officer. The scope of schemes as well as outlays approved for the above said programmes has increased considerably over the last five years. The Government of India/Planning Commission/Delhi Administration, have been emphasising proper formulation, timely implementation and regular monitoring of various plan programmes repeatedly. In the absence of adequate staff for the cell it is very difficult to formulate appropriate plan programmes for long term, medium term & operational plans of NDMC.

3. In view of the increased work load it was felt essential to further strengthen the plan and Monitoring Cell by deploying additional staff and also installing some equipment like personal computers with printers, photocopier machines and Electronic Typewriters etc.

4. The Planning Commission approved the scheme in principle during Annual Plan 1991-92 and a token provision of Rs. 1.00 lac only was sanctioned for implementing the same. One post of Officer Incharge in the scale of Rs. 3000-4500 has been created and proposal for the purchase of an electronic typewriter is under process.

During the Eighth Five Year Plan the following posts are proposed to be created :—

1. Statistical Officer	1
2. Steno	1
3. Peon	1

To meet the salary of above staff and of the officer in-charge (P & M) already created, an amount of Rs. 5.00 lacs is approved for the Eighth Five Year Plan. An outlay of Rs. 1.00 lac stands sanctioned for the Annual Plan 1992-93.

7. Planning Survey & Monitoring Division (Slum Wing I & II) (MCD)—(Rs. 9 lacs)

(A) Slum Wing I (MCD)—(Rs. 5.00 lacs)

The basic objective of the scheme was to equip the S & JJ Deptt-I, with adequate machinery for project formulation, policy making & monitoring the progress of projects/programmes. The posts of Director, Jt. Director, Asstt. Director (Two), Statistical Officer & Research Officer alongwith the necessary subordinate staff were created but after the bifurcation of Deptt. into two wings, the posts of one Jt. Director and one Asstt. Director have been transferred to Slum Wing-II. One jeep has already been purchased under this scheme.

To meet the financial liabilities during the operative Annual Plan, 1990-91 funds to the tune of Rs. 4.32 lacs were provided against which an expenditure of Rs. 12.94 lacs was incurred. In the Annual Plan, 1991-92, no funds were provided under this scheme. However, expenditure to the tune of Rs. 6.57 lacs was incurred during the period. An outlay of Rs. 0.50 lac stands approved for the Annual Plan 1992-93. Plan outlay of Rs. 5.00 lacs is approved for the 8th Plan, 1992-97.

B. Slum Wing-II—(Rs. 4.00 lacs)

Consequent upon bifurcation of Slum Wing, the scheme for night shelters, E.I.U.S., Mata Sundri Road, Structural Improvement in katras, Redevelopment of Shahjahnabad and Rehousing project have been transferred to S&JJ Wing-II. The S&JJ Wing-II, is implementing projects/schemes out of plan resources and it has no resources of its own. Government of India, Planning Commission/Delhi Admn., have been emphasising the need for proper formulation, timely implementation and regular monitoring of various plan programmes. For preparing need based programmes for these slum dwellers and to formulate plans, policies and for proper monitoring in a systematic way, it is very essential to have a fulfilled Planning & Monitoring Division in the Slum & JJ Wing-II. Consequent upon bifurcation of Slum Wing, the following posts have been transferred to this Wing :

S. No.	Name of post	No. of post	Scale of pay
			Rs.
1.	Jt. Director (Plg.)	1	3000-4500
2.	Asstt. Director (Plg.)	1	2000-3500
3.	Stenographer	1	1200-2040
4.	L.D.C.	1	950-1500
5.	Peon	1	750-1040
	Total	5	

The above staff is not sufficient for smooth functioning of the policy, planning and monitoring cell. It would therefore, be essential to strengthen staff during the 8th Plan. The major component of developmental outlays is meant for construction activities and these are to be effectively monitored at the field level so that targetted achievements are fulfilled and corrective measures wherever required may be taken up in time to avoid delays and resulting cost escalation in completion of the projects. This cell is also responsible for arranging review meetings and arrangements for the timely completion of projects.

The following posts are proposed to be created during the 8th Five Year Plan.

S. No.	Name of post	No. of posts	Scale of pay
			Rs.
1.	Planning Assistant	3	1400-2600
2.	L.D.C.	2	950-1500
3.	Peon	1	750-1040
	Total	6	

In addition to the expenditure on the salary of the present staff, the salary of above staff would also be met out of plan resources during the 8th plan period.

An amount of Rs. 4 lacs is approved for this scheme during the 8th Five Year Plan 1992-97 which includes Rs. 0.50 lac approved for the Annual Plan, 1992-93.

8. Strengthening of A.R. Deptt.—(Rs. 4 lacs)

The A.R. Deptt. has to assist the Administration on a regular basis. Complaints, simplification and work studies in both new and old areas have to be attended to. This calls for the continuance of the scheme during the VIIIth Five Year Plan. In view of the responsibilities assigned to this deptt., it is proposed to strengthen it as under :—

Setting up of Directorate of Public Grievances and A.R. on GOI pattern

The present Grievance Redressal Machinery needs to be further geared up as it has not yet been able to achieve the desired results. The present system of pursuing the complaints needs to be changed so as to get feed back and assess the difficulties in the non-redressal of the complaints. This needs the service of a whole time Senior Officer who may handle the cases at the appropriate level and should be able to issue directions to dispose off cases, and to solve public grievances. In fact, the department of Public Grievances and A.R. GOI has recommended the setting up of a Directorate of Public Grievances and A.R. for Delhi Administration which should be headed by a Senior Officer of the rank of Secretary in Delhi Administration. Accordingly, the department proposes to create one post of Secretary-cum-Commissioner (Public Grievances & A.R.) in Delhi Administration and set-up a Directorate on the lines of Govt. of India. The Directorate would need the assistance of some field functionaries, a Senior Stenographer and a Peon in addition to the existing sanctioned strength. However, before setting up this Directorate Delhi Admn. will make an assessment of the A.R. Deptts. of other states.

Incentive Schemes

In order to encourage the staff, a no. of incentive schemes are proposed to be introduced. The broad areas proposed to be covered are grant of award to Best Employees, identify best department in redressal of public grievances, innovative techniques and implementation of plan proposals, achieving the prescribed targets, award for O & M annual competition, cleanliness, etc. These awards would help in boosting the morale of employees. A Manual of Office Procedure Test was conducted in April, 1991 in which nearly 335 employees participated and more than 50% could secure I & II prizes, securing over 60% marks. It helped in training about 400 persons. Similar tests are being conducted for Employees of MCD/NDMC and other local bodies/undertakings.

O & M activities and on the spot training to staff

No systematic procedure is being followed for proper maintenance and upkeep of records and files. This adversely affects efficiency, adds to administrative costs and leads to public complaints. Accordingly, there is need for revitalisation of this neglected area. The present filing system shows that the staff is not fully trained and needs to be given periodic training and conduct reviews. As such it is proposed to constitute a team of officers who would carry out on the spot inspections and provide necessary training to the staff in this area. Audio-video aids like TV, VCR etc. would be needed to give effective results.

To begin with, two departments are proposed to be covered during the 8th Plan in a phased manner. Therefore, new teams comprising of one A.D., and one Research Assistant per team and one Dy. Director for supervisory work will be created.

For effective monitoring of work and undertaking O & M activities viz-a-viz other activities the department would need creation of the following posts for strengthening the existing AR machinery during the 8th Plan.

O & M Officer (2200-4000)	One
Asstt. Director (2000-3500)	Two
Research Assistant (1640-2900)	Two
Sr. Stenographer (1400-2300)	One
LDC (950-1400)	One
Driver (950-1400)	One
Peon (750-950)	One
Total :	Nine

Further posts would be identified as and when required.

The Department also proposes to instal a micro computer for monitoring public grievances and complaints viz-a-viz performance of repetitive work and one vehicle may also be needed for the Directorate.

Physical Targets

The physical targets proposed to be achieved are as under :—

Sl. No.	Item of Work	Unit	1992-97	1992-93
1.	Conduct Method/Procedural Studies	Studies	30	6
2.	Punctuality Drives	No.	600	120
3.	Issue of Glimpses/Papers/Articles	No.	20	4
4.	O & M Inspection	No.	120	24
5.	Redressal of public grievances	Process all complaints and followup.		
6.	Issue of O & M instructions	No.	As per requirement	
7.	Organise O & M competition and grant of awards	Annual	5	1

An outlay of Rs. 4 lacs is approved for the Eighth Five Year Plan, 1992-97, which includes Rs. 1 lac for Annual Plan 1992-93.

9. *Strengthening of Directorate of Audit—(Rs. 5 lacs)*

The Directorate of Audit was established in 1977. Work load has multiplied but the staff strength of the Directorate remains the same. It should have been strengthened suitably with the increase of the work load. Each audit requires a thorough and critical review/analysis by trained staff of all auditable documents. The back-log has increased year after year. The position is as under :—

Total No. of units	2200
Audit years pending	10,000

The Administrative Reforms Department has recommended the creation of additional posts as detailed below :—

S. No.	Name of the Post	Scale	No. of posts
		Rs.	
1.	Joint Director	3700-5000	1
2.	Deputy Director	3000-4500	1
3.	Audit Accounts Officer	2375-3500	6
4.	Jr. Accounts Officer	1640-2900	6
5.	Sr. Accountant/Asstt./Head Clerk	1400-2300	25
6.	Jeep Driver	950-1500	1
7.	Daftry	775-1025	1
		Total :	41

The final report of A.R. Deptt. is awaited. The Directorate had proposed a plan scheme which was approved by Planning Commission with a token provision of Rs. 1.00 lac (Rev.) for implementation during 1989-90 & 1990-91. During the period 1989-90, one post of Driver and one Daftry were created. The following 9 posts have been created during 1990-91 :

	Rs.		
1.	Accounts/Audit Officer	2375-3500	3
2.	Jr. Accounts Officer	1640-2900	3
3.	Sr. Accountant/Asstt./Head Clerk	1400-2300	3
		Total :	9

An approved outlay of Rs. 1.00 lac is provided for 1992-93. The proposals for creation of posts during the Annual Plan 1992-93 are as under :—

S. No.	Name of the Posts	Scale	No. of posts
		Rs.	
1.	Accounts/Audit Officer	2375-3500	2
2.	Jr. Accounts Officer	1640-2900	2
3.	Sr. Accountant/Asstt./Head Clerk	1400-3300	8
		Total :	12

A provision of Rs. 5.00 lakhs has been approved for 8th Plan 1992-97 including Rs. 1.00 lac for Annual Plan 1992-93 for pay & allowances of posts likely to be created in 1992-93. The provision also includes office expenses, expenditure on account of telephone, typewriter & contingency etc.

*10. Creation of a Monitoring and Evaluation Cell in Urban Improvement Deptt.—
(Rs. 50 lacs)*

The city of Delhi has witnessed rapid urbanisation in the last few decades. Rate of growth of population has also remained high mainly due to immigration. This has led to a large scale expansion of human settlements and an uneven pattern of development with some portions having been modernised and rebuilt, while others continue to degenerate. Several measures have been taken in the past to improve the situation and an attempt has been made to evolve a long term urban development strategy in consultation with the land & building Department and the Delhi Development Authority and MCD. It has been realised that the existing administrative infrastructure in Delhi is not adequately equipped to redress the problems.

There are four different sets of settlements, which require attention urgently.

These are (a) notified slums, (b) resettlement colonies, (c) JJ Clusters and (d) unauthorised colonies. A number of schemes have been initiated for improvement of these settlements by DDA and MCD and it is felt that these activities should be consolidated by a new Monitoring and Evaluation Cell to be created in the Urban Improvement Department. This department would be responsible for conceptualisation of the various strategies to be adopted for development of various sets of settlements, translation of these strategies into specific projects and proposals, entrusting them to appropriate executive agencies and monitoring progress. One of the important objectives of the plan scheme is to evolve and execute a three pronged strategy for the development of jhuggi jhopri clusters. This would be achieved by (a) relocating of such clusters where the encroached lanes are required for execution of projects, (b) developing and upgrading in Situ. such clusters which are not required immediately for projects, and (c) providing basic civic amenities in the remaining clusters. The Monitoring/Evaluation Cell, created in the Urban Improvement Department, will work in close association with Slum Wings and UBS Programme, besides the local bodies for improvement of these areas, especially the resettlement and unauthorised colonies.

The following posts have been created during 1990-91 for this Cell and are proposed to be continued :—

S. No.	Name of the Post	No. of Post	Pay Scale (Rs.)
1.	Joint Secretary	1	3700-5000
2.	Deputy Secretary	1	3000-4500
3.	Dy. Director (Statistics)	1	3000-4500
4.	Accounts Officer	1	2375-3500
5.	Asstt. Director (Plg.)	2	2200-4000
6.	Desk Officer	2	1640-2900
7.	Private Secretary	1	2000-3200
8.	Jr. Stenographer	7	1200-2040
9.	U.D.C.	1	1200-2040
10.	L.D.C.	4	950-1500
11.	Peon	8	750-940
Total		29	

The cell will be under the overall charge of the Commissioner-cum-Secretary (Urban Improvement/LSG) as part of the Urban Improvement Department. There would also be an Accounts Officer to deal with all financial and account matters. The cell will undertake various studies and surveys required for various components of the strategies to be adopted in the J. J. clusters and notified slums. Building up a reliable database will be one of the primary objectives of this cell. The cell will also establish contact with the various voluntary sector bodies and NGOs for their effective participation in implementation of measures for improvement of living conditions in these areas.

It is further proposed to strengthen the Monitoring and Evaluation Cell of U. I. Department, by creating the following additional posts during the Eighth Five Year Plan 1992-97 :

Year	Post	No. of posts	Pay Scale Rs.
93-94	Asstt. Director (Evaluation)	1	2200-4000
	Asstt.	1	1400-2300
	Legal Asstt.	1	1640-2900
	Stat. Asstt.	3	1400-2300
	Steno	1	1200-2040
	U.D.C.	1	1200-2040
	Peon	1	750-940

94-95	A.A.O.	1	2000-3200
	Supdt./DO	1	1640-2900
	R.O.	1	1640-2900
	Sectt. Asstt.	2	1400-2300
	Steno	1	1200-2040
	Peon	1	750-940
95-96	A. O.	1	2375-3500
	R. O.	2	1640-2900
	J. A. O.	1	1640-2900
	Steno Gr. II	1	1400-2300
	Steno Gr. III	1	1200-2040
	UDC	1	1200-2040
	LDC	1	950-1500
96-97	Jt. Director	1	3000-5000
	(Monitoring & Evaluation)		
	Stat. Asstt.	1	1400-2300
	Steno	1	1200-2040
	UDC	1	1200-2040
	Peon	1	750-940
	Total	<u>29</u>	.

An outlay of Rs. 50.00 lacs is approved for salaries, purchase of Furniture, Stationery, Vehicle, Telephones etc. for Eighth Five Year Plan, which includes Rs. 10 lacs for 1992-93.

XI—2—TOURISM

Schemes for the development and promotion of Tourism in Delhi are included under this sector. The main programmes are setting up of a Rural Tourist Complex, Tourist Information Centres, Illumination of historical monuments, development of lakes and publicity etc. for the promotion of Tourism in Delhi.

7th Five Year Plan 1985-90 and the Annual Plans 1990-91 and 1991-92

The following table indicates the agency-wise expenditure incurred during the 7th Plan and Annual Plans 1990-91 and 1991-92.

		(Rs. in lacs)		
Sl. No.	Agency	Actual expenditure		
		7th Plan 1985-90	Annual Plans	
			1990-91	1991-92
1.	Deptt of Tourism	19.00	26.70	25.00
2.	Food Crafts Institute	61.45	—	—
3.	D.T.T.D.C.	230.00	55.00	75.00
Total :		310.45	81.70	100.00

Work for development of a Rural Tourist Complex was initiated 20 acres of land were acquired in Said-ul-Ajaib, in Mehraulib lock. The construction of boundary wall was completed. DTTDC set up two Tourist information counters at Calcutta and Bombay during 1991-92.

8th Five Year Plan 1992-97 and Annual Plan 1992-93

The agency-wise break-up of the approved outlay for the 8th Five Year Plan and the Annual Plan 1992-93 is indicated below :—

		(Rs. in lacs)	
Sl. No.	Agency	Approved Outlay	
		8th Plan 1992-97	Annual Plan 1992-93
			1992-93
1.	Deptt. of Tourism	70.00	20.00
2.	F.C.I.	100.00	10.00
3.	D.T.T.D.C.	430.00	70.00
Total :		600.00	100.00

The Scheme for Rural Tourist Complex at Said-ul-Ajaib was transferred to DTTDC and share capital has been provided for this scheme. The scheme "Grant-in-aid to DTTDC for Information Centre" which was approved in 1991-92 has been approved for the 8th Five Year Plan 1992-97 and the Annual Plan 1992-93.

In addition to the on going schemes the following new schemes viz. Wayside amenities at highways and Civic amenities at important monuments and Coffee Home are approved during 8th Plan period & Annual Plan 1992-93 as Share Capital based Schemes.

The Agency-wise details of Schemes approved for the 8th Five Year Plan and the Annual Plan 1992-93 are as follows :—

I. Tourism Department (Rs. 70 lacs)

1. Strengthening of Directorate of Tourism (Rs. 12 lacs)

Expenditure sanctions have been processed by the statistical cell since it was set up in 1983. The cell was created on the recommendation of an Expert Committee under the Chairmanship of Director General of Tourism, Govt. of India to conduct surveys and collect data about the domestic tourists in Delhi. Since no infrastructure facilities are available in the Tourism Department, DTTDC and Food Craft Institute, non-statistical work is also being done by the statistical Cell. In spite of the work load of non-statistical work entrusted to the statistical staff created for conducting survey and collection of data, the statistical cell during the 7th Five Year Plan collected data from licenced Hotels/Guest Houses/Dharamshalas etc. and brought out the following reports :—

- (i) Tourist Statistics 1986.
- (ii) Directory of Tourist Companies.
- (iii) Tourist Statistics 1987.
- (iv) Tourist Statistics 1988.

To give a boost to tourism in Delhi and streamline the implementation of the promotional programmes for tourism, it is necessary to create the required infrastructure.

The Tourism Deptt. was implementing the following two schemes during the 7th Five Year Plan for the promotion of Tourism in Delhi.

1. Development of Rural Tourist Complex.
2. Licensing of Tour Operators, Travel Agents etc.

The work relating to Food Craft Institute was also transferred from the Directorate of Technical Education to this Department.

Keeping in view the above facts, there is dire need of strengthening the Tourism Deptt. by creating staff comprising of the technical planning staff which may formulate and implement new schemes effectively. The following posts under the scheme for strengthening of Tourism Deptt. are proposed :—

S. No.	Name of the Post	Pay Scale	No. of Posts
1.	Deputy Director (Stat.)	Rs. 3000-4500	1
2.	U.D.C.	„ 1200-2040	1
3.	Stenographer	„ 1200-2040	1
4.	L.D.C./Typist	„ 950-1500	1
5.	Process Server	„ 750-940	1
Total Posts			5

Provision for purchase of furniture, installation of telephone, contingencies etc. is also made under the Scheme. For the Eighth Five Year Plan, an amount of Rs. 12 lacs stands approved, out of which Rs. 3.00 lacs has been approved for Annual Plan 1992-93.

2. *Publicity—(Rs. 11 lacs)*

In this great city, the old and new have blended into one. Delhi is host to the nation's famous historic treasures and monuments viz. Qutab Minar, the Red Fort the Jama Masjid, Purana Quilla (Old), Humayun's Tomb, Laxmi Narain Mandir, Gurudwara Bangla Sahib and Sis Ganj. Budh Vihar of Budhists and other buildings of National importance such as the National Museum, Jantar Mantar and Tall T.V. Tower etc. A large number of domestic and foreign tourists are attracted to Delhi, the capital of India.

They frequently fall into the clutches of touts, agents and other unlawful persons. Sometimes they are forced to stay at inconvenient, unhygienic and high priced places. To avoid these pitfalls tourist literature is essential.

Posters, maps of Delhi, information about places of tourist interest, the modes of transport and their availability, information regarding cultural activities, information about tour operators/Travel Agents and Hotel accommodation available in Delhi are to be made available to the tourist. The publication of a booklet which may give complete information about different places of Delhi plays a vital role in the promotion of Tourism.

Printing of guides, folders, calendars, putting up of Hoardings and Pictures and Posters depicting various tourist attractions in Delhi are proposed to be published. For the 8th Five Year Plan an amount of Rs. 11.00 lacs is approved out of which Rs. 4.00 lacs is for 1992-93.

3. *Illumination of Historical Monuments—(Rs. 7.00 lacs)*

A large number of tourists, domestic as well as foreign, visit the historical monuments situated in different parts of the city.

The illumination of such monuments bring them alive and is a major attraction for tourists.

In 1990-91 Hauz Khas and Safdarjung Tomb were selected for illumination. For this purpose an amount of Rs. 3.00 lacs was provided. During 1991-92 also an amount of Rs. 3.00 lacs was spent under this scheme. One monument was illuminated. For 1992-93 an amount of Rs. 2.00 lacs stands approved to illuminate Hauz Khas. During the 8th plan period it is proposed to illuminate atleast 2 monuments for which Rs. 7.00 lacs has been provided DTTDC will implement the scheme on behalf of the Deptt. of Tourism.

4. *Sun-Et-Lumire—(Rs. 9.00 lacs)*

In the traditional culture of India, Sun-Et-Lumire envelops the entire life of man in a shell of melodic sound. Songs and music celebrate the seasonal rythms in nature. This folk tradition has been a great source of India's musical culture. But through conscious craftsmanship it will have to refine its spontaneity if music has to carry its classical tradition. Sun-Et-Lumire keeps man in close touch with nature and helps him to transform his work into joy and happiness.

At present, Sun-Et-Lumire programme is being staged at Red Fort in Delhi.

This programme shows large crowds and is popular mode of entertainment for tourist visiting Delhi. It is proposed to start Sound and Light Show programme at Purana Quila for which necessary permission has been obtained from the Archaeological Survey of India and work of writing of script started and the cost would be Rs. 50 lacs approximately. Rs. 2.00 lacs has been approved for the Annual Plan 1992-93 and Rs. 9.00 lacs for the 8th Plan. The scheme is being implemented by DTTDC on behalf of Tourism Deptt.

5. *Restoration of denotified monuments—(Rs. 11.00 lacs)*

There are many denotified monuments which are neglected due to lack of awareness of their importance and past glory. Due to inadequate and improper maintenance of these denotified monuments, unhygienic conditions develop around them. Tourist hesitate to visit these neglected places. Restoration and beautification of these monuments, will attract tourists to these monuments.

The historical monument at Bhuli Bhatiyari Ka Mahal is already under Restoration and 85% of the work has been completed. The entire work is proposed to be completed during the Annual Plan 1992-93. During the 8th plan period one more monument is proposed to be restored. Rs. 3.00 lacs has been approved for the Annual Plan 1992-93 and Rs. 11.00 lacs for the 8th Plan. The scheme is being implemented by DTTDC on behalf of Tourism Deptt.

6. *Development of lakes—(Rs. 20.00 lacs)*

A large number of domestic tourists visit Delhi annually and stay for about 3 days. During the 8th Five Year Plan it has been decided to develop some lakes situated in the rural area to attract tourists. The lakes lends itself to various water sports. With proper and imaginative land scaping it can be developed into an attractive tourist spot. Rides, pedeller and rowing boats could be provided. Musical Fountains could also be an attraction. A large number of fish could be bred in the lake. Facilities for Angling on payment and feeding fish in shallow water can be provided.

Bhalaswa lake in North Delhi near Samaipur Badli, is being developed by DTTDC as a Tourism Centre for aquatic sports with boating, fishing, restaurant etc. A boat house has already been constructed during 1991-92. Installation of a tubewell is in progress. Land Scaping of some of the area is also proposed to be taken up. During the 8th plan period it is proposed to develop atleast two (2) Lakes for recreation.

For the 8th Five Year Plan, a sum of Rs. 20.00 lacs stands approved including Rs. 6.00 lacs for the annual plan 1992-93. The scheme will be implemented by Delhi Tourism and Transport Development Corporation on behalf of Tourism Deptt.

II—*Food Craft Institute—(Rs. 100.00 lacs)*

The Food Craft Institute was established by the Ministry of Tourism, Govt of India on 1st January, 1983 to meet the growing demand of trained manpower for the Hotel Industry. This Institute was transferred to the Directorate of Tourism, Delhi Administration w.e.f. 1-1-88. It imparts training of 18 months duration of certificate level courses like cookery, bakery, confectionery, restaurant and counter services house keeping etc. The present intake capacity of the institute is 120. After five

years of its establishment, all liabilities/responsibilities (recurring and non-recurring) of this institute are being born by Delhi Admn. So far this institute is being run in a Sr. Sec. School Bldg. of the Education Deptt. of Delhi Admn. A piece of land measuring 5.06 acres in Lajpat Nagar-IV was allotted for the construction of the building of this institute. The payment of the cost of the land of the institute has already been made to the D.D.A. Due to non-availability of funds the building of the institute could not be constructed. It is now proposed to construct the bldg. of the institute during the 8th Five Year Plan. The total cost of the building of the institute will be about Rs. 415.00 lacs. The building of the institute consists of an Administrative Block, separate rooms for different Deptt. i.e. 1) Reception & Book keeping, 2) House keeping 3) Restaurant and counter services, cookery 4) Bakery and confectionery 5) Food, Science & Technology and 6) Allied subjects. Besides it is also proposed to construct staff quarters for the Principal, Sr. Lecturers and other staff of the institute.

For the 8th Five Year Plan an amount of Rs. 100.00 lacs has been approved, including Rs. 10.00 lacs for the annual plan 1992-93 for construction of the building.

III. Delhi Tourism and Transportation Development Corporation—(Rs. 430 lacs)

Delhi Tourism Development Corporation was registered as a Govt. Company on 12th December, 1975 for the promotion, propagation and development of Tourism in Delhi. Its name was changed to Delhi Tourism and Transportation Development Corporation in 1989-90. The Corporation has been catering to the requirements of domestic tourists and low budget foreign Tourists.

During the 8th Five Year Plan the DTTDC proposes to provide certain infrastructural facilities for the tourists. For the 8th Five Year Plan an outlay of Rs. 430 lacs is approved for implementation of Tourism promotion schemes by DTTDC. The outlay approved for DTTDC for the Annual Plan 1992-93 is Rs. 70 lacs. The scheme-wise details are as follows :—

1. Share Capital Contribution to DTTDC—(Rs. 380 lacs)

A sum of Rs. 60 lacs has been provided in the A.P. 92-93 as share capital contribution to DTTDC.

An outlay of Rs. 380 lacs is approved as share capital contribution to DTTDC for the following schemes/programmes during the 8th Five Year Plan period.

(a) Wayside amenities/facilities on Highways

Keeping in mind the heavy tourist in flow to the Capital by road, need was felt to provide cheap accommodation Telex, S.T.D., Fax and such other facilities for the tourist entering the Capital through different National wage wise.

DTTDC possesses a plot of land on N.H. 8, close of the International Airport. This plot was given to DTTDC by the Ministry of Transport. In the proposed amenity/facility centre on this site DTTDC would provide a Fast Food Counter, Restaurant, Information Centre, Toilet Block, Short Stay, Rest Room and other communities facilities. The estimated cost of the project is Rs. 150 lacs.

During the Annual Plan 1992-93 a sum of Rs. 25 lacs has been provided for this scheme out of the total share capital contribution of Rs. 60 lacs.

(b) Coffee Home

In order to provide hygienic and reasonably priced food for the tourists, it was felt necessary to set up Catering Units. DTTDC opened three Coffee Homes in the Capital. These Coffee Homes at Baba Kharak Singh Marg, Laxmi Nagar District Centre and R. K. Puram are already functioning and catering to about 4,000 people on an average per day. The Corporation proposes to set up another three such units in Delhi at an estimated cost of Rs. 140 lacs. The Coffee Home at IGIA is expected to become operational by mid-September 1993. The other two units are likely to be set up in University Area and District Centre Janak Puri. The Corporation is also presently exploring the possibility of a 4th Coffee Home in the CGO Complex. The scheme has a provision of Rs. 20 lacs in the Annual Plan 1992-93 out of the Share Capital Scheme.

(c) Camping sites and Woodland Huts

DTTDC is planning to set up Camping Sites within and outside Delhi. The Camping facilities outside Delhi will be provided through a mobile unit for the tourists booked by DTTDC for various destinations. These Camping Sites will provide facilities for parking of vehicles, hygienic and reasonably priced food, accommodation in tents or temporary structures at reasonable costs and free information about Delhi and other places of interest in the country. One such unit was set up in Sehestra Dhara, Dehradun. The Corporation is also being allotted a site on the Yatra Sector in the Uttar Khand region of U.P. This is likely to become operational in September, 1992. The Corporation has also taken over other picnic huts from DDA at three sites namely :—Hauz Khas, Kalka ji District Forest and Mehrauli Woodlands. The Hauz Khas huts are already operational and the hut at other sites are to be renovated. The total estimated cost for these works is about 40 lacs. Provisions of Rs. 10 lacs is there for implementation of this scheme in Annual Plan 1992-93.

(d) Development of Rural Tourist Complex

This scheme has spilled over from the 7th Five Year Plan. This scheme was transferred to DTTDC during the Annual Plan of 1990-91. Delhi needs a complex where tourists can have a feel of the Rural life of India. It is proposed that a Rural Tourist Complex be developed to meet the requirement of tourists in Delhi. For this purpose 20 acres of land were acquired in Said-ul-Ajaib in the Mehrauli Block. DDA has permitted a tourist complex here. The work of developing the tourist complex has been started. A boundary wall has been built. The project costs about Rs. 900 lacs. A token provision of Rs. 5 lacs has been made for the Annual Plan 1992-93.

2. Grant-in-aid for Tourist Information Counters—(Rs. 50 lacs)

Tourist Information Counters provide all necessary assistance to tourists with regard to travel, stay and sight seeing. 10 strategically placed counters are being run by DTTDC.

There is a need to extend this service to commercial areas visited by domestic tourists as well as sources of tourist traffic to Delhi. As a result, the Corporation has opened information counters in commercial areas like Connaught Place and R. K. Puram. In Annual Plan 1991-92, two information counters were set up outside,

the capital, one in Calcutta and other in Bombay. In the 8th Five Year Plan. DTTDC proposes to open additional counters outside Delhi at Ahmedabad, Madras and Bangalore.

Information counters located in the capital are providing assistance to about 500 tourists a day. The Corporation has proposed an outlay of Rs. 50 lacs for running of the existing information counters and for opening of new information counters. In the Annual Plan 1992-93 the approved outlay is Rs. 10 lacs. For 8th Plan 1992-97 an outlay of Rs. 50 lacs has been approved.

VIII—SURVEY & STATISTICS

Plan schemes of Bureau of Economics & Statistics and the Sales Tax Department are included under this sector.

The BES is the Central Agency in Delhi for collection, compilation and presentation of statistical data on all aspects of Socio-Economic Developments in Delhi.

The Bureau is actively associated with the National Sample Survey Organisation and has been participating in its various Survey rounds. Statistics on State Income, Annual Survey of Industries, vital Statistics, Capital Formation, Prices etc. is being collected regularly.

During the last Seven Five Year Plans, BES assisted departments of Delhi Administration in creating their own statistical set up.

For planned development and administrative control, Delhi requires a sound statistical system, which provides comprehensive data for a particular geographical area. Once the concept gains momentum, the entire statistical system will undergo administrative change. All subjects will be covered by a district Statistical Agency or each department having its own district set up.

There are many areas for which, no data is available at present Housing Statistics, Environment Statistics, Local Bodies Statistics, Area-wise Statistics, Cultural Statistics Banking Statistics etc. Thus during the Eight Five Year Plan 1992-97, the Bureau has to further expand its activities in several new directions to meet the growing data requirements of Planning Department and other Plan implementing department of Delhi Administration and Local Bodies. To meet the ever increasing data requirements, several new schemes have been formulated and old continuing schemes have also been re-formulated to meet the changing needs and circumstances.

7th FIVE YEAR PLAN 1985-90, ANNUAL PLAN 1990-91 and 1991-92

The Agency-wise Expenditure for 7th Plan 1990-91 and 1991-92 is given below:—

S. No.	Agency	(Rs. in lacs) Expenditure		
		7th Plan 1985-90	1990-91	1991-92
1	2	3	4	5
1.	Bureau of Economics & Statistics	84.70	6.58	3.17
2.	Sales Tax Deptt.	42.25	9.73	10.88
Total :		126.95	16.31	14.05

EIGHTH FIVE YEAR PLAN 1992-97 AND ANNUAL PLAN 1992-93

The following table indicates the appointment Outlay for 8th Plan and Annual Plan 1992-93.

S. No.	Agency	(Rs. in lacs) Approved outlay	
		8th Plan 1992-97	Annual Plan 1992-93
1	2	3	4
1.	Bureau of Economics & Statistics	75.00	12.00
2.	Sales Tax Deptt.	125.00	38.00
Total :		200.00	50.00

The Agency-wise/Scheme-wise details are as follows :—

I. BUREAU OF ECONOMICS & STATISTICS

1. *Strengthening of Vital Statistics Units—(Rs. 4 lacs)*

The BES also functions as the Office of Chief Registrar, Births & Deaths and is responsible for implementation of the Registration of Births & Deaths Act, 1969, in Delhi, which is being implemented w.e.f. 1-7-70. Registration is being done by three local bodies viz. MCD, NDMC and Delhi Cantonment Board at about 200 Registration Centres located in different parts of Delhi.

The Vital Statistics Unit is responsible for coordination of the work of Registration of Births & Deaths with the Local Bodies and Registrar General, India. Arrangements for printing of forms, distribution of stationery, preparation of the directory of officials engaged in the Registration work, translation of Birth & Death Certificates for the persons going abroad, attending to public grievances relating to registration of Births & Deaths, training of registration staff, collection and compilation of Vital Statistics, analysis of the annual data, preparation of the Annual Report of Births & Deaths, development of software for tabulation of births & deaths data by local bodies etc. are also being handled by this Unit.

The following new items of works are proposed to be taken up in the Eighth Five Year Plan 1992-97 :—

- (i) Computerisation of Births & Deaths data to reduce timelag in submission of the Annual Reports to Govt. of India and to provide software and guidance including training to staff of local bodies.
- (ii) To centralise the record upto 1970 at Head Quarters (Bureau of Economics & Statistics) and to facilitate the public in getting their Births & Deaths Certificates at a single place. Necessary arrangements will also be made.

for optical disc storage of the old records as the registers of Births & Deaths are records of permanent importance and are to be preserved for 100 years.

- (iii) To compile mortality data from the Death Registration Forms as contemplated in the registration of Births & Deaths Act indicating cause of death. During Eighth Five Year Plan, it is proposed to tabulate and compile about 60,000 forms, which are being filled by institutions each year.
- (iv) To facilitate the public in getting Births & Deaths Certificates on the spot, it is proposed to implement Model Registration Scheme of Births & Deaths in major hospitals. One Statistical Investigator will be provided by Bureau of Economics & Statistics to these Hospitals and one to A.I.I.M.S. They will be designated as Sub-Registrar, Births & Deaths.

To start the above four new items of work, following posts are proposed to be created in the 1st Year of the Eighth Five Year Plan i.e. 1992-93 :—

S. No.	Name of the Post	Pay-Scale Rs.	No. of Posts
1.	Assistant Director	2200-4000	1
2.	Stat. Assistant	1400-2300	2
3.	Photographer	1400-2300	1
4.	Medical Ceder	1400-2300	1
5.	Stat. Investigator	1200-2040	6
6.	Microfilm Machine Operator	1200-2040	1
7.	Peon	750-940	1
TOTAL :			13

For centralisation of records one optical disc unit alongwith accessories is proposed to be purchased. For 8th Plan 1992-97, Rs. 4 lacs are approved which includes Rs. 0.50 lac for 1992-93.

2. Strengthening of EDP Cell - (Rs. 20 lacs)

The Electronic Data Processing (EDP) Cell was set up in the BES during the Fourth Five Year Plan to process Socio-Economic Survey data of Delhi. Data in respect of Annual Survey of Industries, Annual Reports of Births and Deaths, Estimates on State Income, Index number of Industrial Production, Statistical Abstract, Small Area Statistics, Graphic presentation are being processed with the help of a Computer System and reports are being brought out.

Presently a large no. of jobs are awaiting data processing and tabulation including data of 39th Round to 47th Round of N. S. S. O. Surveys.

To clear such a huge back-log of pending data and for timely release of various reports it is proposed to equip the EDP Cell of BES with Desk Top Printing facilities besides installing new & powerful Computer Systems to timely process the ever increasing Voluminous data.

Keeping in view the pendency of old jobs, addition of new jobs and for starting Desk Top Publishing, it is proposed to strengthen the EDP Unit in Annual Plan 1992-93 by creating the following posts as suggested by the working Group of the Planning Commission.

(i) System Analyst	1
(ii) Data Entry Operators	5
(iii) Pump Supervisor	1
(iv) Printing Supervisor	1
	1
Total :	8

The following items are proposed to be purchased for EDP Unit during 8th Plan 1992-97 :

- (a) Uninterrupted Power Supply (UPC) of 10 KVA
- (b) Daisy Wheel Printer (132 Columns)
- (c) Desk Top Publishing (DTP) Unit, (Mouse, Software, 'Ventura' Scanner, Laser Printer)
- (d) Graphics Ploter (4/6/8/ pens)
- (e) One powerful Mini-Computer System to replace existing NELCO System
- (f) Modulator and demodulator (Modems) for net working
- (g) Microwave Link for Network.
- (h) One Vehicle.

An amount of Rs. 20 lacs is approved for 8th Plan which includes Rs. 5.50 lacs for 1992-93 to implement the scheme.

3. *Training of Statistical Personnel—(Rs. 2.00 lacs)*

A 'Training Unit' was established in BES during Fourth Five Year Plan to provide in Service training to statistical personnels.

In service training to Senior Level and Middle Level Statistical Officers is being provided by the Central Statistical Organisation G.O.I. Responsibility of training Junior Level Statistical personnels, Computer Data Processing and field staff etc. has been entrusted to BES alongwith the development of manual and syllabus etc.

It is proposed to purchase the following equipments for training :

- (i) Film/TV Projector
- (ii) Tape Recorder, Amplifier and Speaker System
- (iii) Audio/Video Tapes
- (iv) Slide Projector, etc.

Hiring of training equipments is also envisaged under the Scheme.

Rs. 2 lacs is provided for 8th Plan out of which Rs. 0.40 lac is for 1992-93.

4. *Strengthening of Annual Survey of Industries Cell—(Rs. 2 lacs)*

The Annual Survey of Industries is conducted under the "Collection of Statistics Act, 1953" and the Rules framed thereunder in 1959. ASI covers all factories registered under Sections 2m (i) and 2m (ii) of the Factories Act of 1948. The field work of the Survey is carried out by the National Sample Survey Organisation, Govt. of India. Copies of all the ASI Schedules for the factories registered in Delhi are supplied to Delhi Administration for further processing. For this purpose, the ASI Cell was set up in BES during 1986-87.

The sampling size of the ASI and its coverage had been enhanced from 1987-88 onwards and hence, the work-load of ASI Cell has increased considerably. The number of industrial units in Delhi is also increasing. To release the Annual Reports in time and to conduct regular studies on the Organised Industrial Sector in Delhi, it is proposed to strengthen the ASI Cell in the Eighth Five Year Plan 1992-97 by creating the following posts during 1992-93 :

	Rs.	
(i) Asstt. Director	(2200-4000)	1
(ii) Stat. Assistant	(1400-2300)	1
(iii) Typist	(950-1500)	1
	TOTAL :	<u>3</u>

A sum of Rs. 2 lacs is approved for 8th Plan 1992-97, out of which Rs. 0.40 lac is for 1992-93.

5. *Strengthening of Socio-Economic Survey Unit—(Rs. 7.00 lacs)*

The BES is participating in the Nation-wide Surveys of National Sample Survey Organisation since its 25th Round (July 1970 to June 1971). Owing to faster growth in population, complexity of many Socio-Economic characteristics and peculiarities of Delhi, present sample size in Delhi is three times of Central Sample size.

The Socio-Economic Survey Unit has two sections i.e. Field Section and Data Processing & Analysis Section, each headed by an Assistant Director. The actual Survey work and coding is done by the field section. Scrutiny, Checking, processing of data and releasing of reports is done by Data Processing & Analysis Section.

For better co-ordination between these two sections and with NSSO, it is necessary to bring both these sections under one Senior Officer. In view of the very large population of Delhi which is rapidly increasing due to migration, it is proposed to increase the sample size from the present 3 times to 4 times matching basis in the Eighth Five Year Plan 1992-97. For this purpose, the Socio-Economic Unit has to be

further strengthened according to the norms of NSSO. Accordingly the following posts are proposed to be created in the Eighth Five Year Plan 1992-97 :—

S. No.	Name of the Post	Pay-Scale	No. of Post
		Rs.	
1.	Jt. Director	3000-5000	1
2.	Data Entry Operator	1200-2040	2
3.	Jr. Stenographer	1200-2040	1
4.	Stat. Assistant	1400-2300	5
5.	Stat. Investigator	1200-2040	15
6.	L.D.C.	950-1500	1
7.	Peon	750-940	2
8.	Daftry	775-1025	1
		Total :	<u>28</u>

However, the Working Group of the Planning Commission for 8th Plan and Annual Plan 1992-93 suggested that in view of financial constraints the additional staff requirements may be restricted to one post each of Joint Director and Steno. Rs. 7.00 lacs has been approved for 8th Plan which includes Rs. 0.50 lac for 1992-93.

6. Strengthening of Capital Formation and Regional Accounts and Input-Output Transaction Cell—(Rs. 2 lacs)

A. The estimates of Capital formation which indicate the extent of investment taking place within the State/Territory are extremely useful for policy formulation and planning purposes. On the recommendation of the Regional Accounts Committee of Central Statistical Organisation, Govt. of India a nucleus Capital Formation and Regional Accounts Cell was set up in the BES in the Annual Plan 1988-89.

At present, analysis of Budget documents of Delhi Admn. is being done and a report of Economic-cum-Purpose Classification of the Budgets of Delhi Administration is under preparation. It will reflect the impact on the economy of Delhi by the transactions made by the Delhi Administration.

In view of the importance of work of Capital Formation and Regional Accounts Cell, it is proposed to strengthen this Cell during the Eighth Five Year Plan 1992-97, to prepare the estimates of Capital Formation and consumption expenditure of the entire public sector comprising of Administrative Departments of the Govt. Departmental Enterprises and Non-departmental Enterprises (Financial and non-financial), private corporate and Household sectors in Delhi.

The following posts are proposed for creation in the Annual Plan 1992-93.

	Rs.	
(i) Jt. Director	3000-5000	1
(ii) Asstt. Director	2200-4000	1

(iii) Stat. Asstt.	1400-2300	1
(iv) Stat. Inv.	1200-2040	2
(v) Stenographer	1200-2040	1
(vi) Peon	750-940	1
	Total :	<u>7</u>

Strengthening of the Cell is necessary to release the reports of Capital Formation and consumption expenditure of Public Sectors, Private Corporate and Household Sectors respectively in time for policy formation and perspective planning of the Territory and taking additional items of work.

B. The production process of a complete economic system can be described in a Unified way through Input-Output Transactions Table. The IOTT is a convenient form to present the destinations of outputs of individual industries over a given period of time and the origins of the costs associated with these outputs. With the availability of IOTT, it is possible to work out the requirements of various industries involved in the production process in the State alongwith their cost-benefit ratio and also of the other industries could be developed whose output is required at State level. In other words, the IOTT at State level gives a bird's eye view of the production scenario for achieving the balanced growth of the State.

For preparation of the Input-Output Transaction Table, the entire economy has been divided into 115 Sectors comprising of 32 Primary, 66 Secondary and 17 Tertiary Sectors. In the primary production, 17 Sectors belong to agriculture, three to animal husbandry and one each forestry and fishing and the remaining 10 to mining. The level of disaggregation adopted for manufacturing industries generally correspond to 3 digit level of National Industrial Classification (NIC)—1987.

Tertiary activities includes services like construction, electricity, gas, water supply, railway, transport, other transport, storage and warehousing, communication, trade, hotels and restaurants, banking, insurance, ownership of dwellings, education, medical and health and other services. All transport activities other than railways which have been clubbed under a single sector termed as other transport.

Being a non-productive sector, public administration and defence has neither any intermediate flows nor any input but appears as a sector in gross domestic product of the economy, its contribution being in the form of compensation of employees. This sector has been included to take complete account of total gross value added by all sectors of the economy. Again the final uses have been distinguished under six categories, namely, (i) Private Final Consumption Expenditure (PFCE), (ii) Government Final Consumption Expenditure (GFCE), (iii) Gross Fixed Capital Formation (GFCF), (iv) Change in Stocks (CIS), (v) Exports of Goods and Services (EXP), (vi) Imports of Goods and Services (IMP).

The Central Statistical Organisation has prepared and released three Input-Output Transaction Tables at all India level for years 1968-69, 1973-74 and 1978-79. The B.E.S. proposes to initiate the work of preparation of IOTT for Delhi for the year 1989-90 for which the detailed data is now available.

To begin with the work, it is proposed to create the following posts during Annual Plan 1992-93 :—

	Rs.	
(i) Jt. Director	(3000-50.0)	1
(ii) Asstt. Director	(2200-4000)	1
(iii) Research Officer	(1640-2900)	4
(iv) Stenographer	(1200-2040)	1
(v) Peon/Messenger	(750-940)	1
Total :		8

Rs. 2.00 lacs is provided for 8th Plan which includes Rs. 0.40 lac for 1992-93.

The Working Group of the Plg. Commission suggested that in view of specialised nature of work, Capital formation and input-output unit may be headed by a Joint Director who may also look after the working estimation of State Domestic Product. Extra posts, one each of Asstt. Director and Steno-typist are also recommended for this Scheme.

7. *Strengthening of Bureau of Economics & Statistics—(Rs. 17 lacs)*

B.E.S. is the Central Agency in Delhi for collection, compilation and presentation of Statistical data. Over the last Seven Five Year Plans, its activities have increased manifold and new areas of official statistics are being added constantly widening its horizon even further.

(a) B.E.S. also prepares and issues periodical and regular reports, like 'Statistical Hand Book', 'Quarterly Digest of Economics & Statistics' and Delhi's Economy in Figures. Moreover, many new plan schemes have been included in Eighth Five Year Plan 1992-97 like setting up of Rural Statistics Cell, Cultural Statistical Cell, Women & Children Statistical Cell etc. Statistical Abstract containing 20 year statistical data has been prepared for the first time. Graphic presentation of statistical data has also been done with the help of Computers.

The Director, B.E.S. is also associated with a number of working Groups, Committees, Task Forces etc. constituted by the Administration as well as Central Statistical Organisation, Planning Commission etc.

To suitably strengthen the Bureau of Economics & Statistics for providing professional support of Statisticians and Economists during Eighth Five Year Plan 1992-97, it is proposed to create following posts under this scheme :—

	Rs.	
(i) Joint Director	(3000-5000)	1
(ii) Jr. Stenographer	(1200-2040)	1
(iii) Ministerial Assistants	(1400-2300)	1
(iv) Store Keeper	(1400-2300)	1
(v) U.D.C.	(1200-2040)	2
(vi) L.D.C.	(950-1500)	3
(vii) Sr. Gestetner Operator	(950-1500)	1

(viii) Peon	(750-940)	2
(ix) Mali	(750-940)	1
(x) Record Keeper	(1200-2040)	1
(xi) Chowkidar	(750-940)	1
	TOTAL (A)	<u>15</u>
B. (i) Hindi Officer	(2000-3200)	1
(ii) Hindi Translator	(1400-2300)	1
(iii) Hindi Typist	(950-1500)	1
	TOTAL (B)	<u>3</u>
	TOTAL (A+B)	<u>18</u>

Rs. 17 lacs has been approved, out of which Rs. 2.00 lacs is for 1992-93 to implement the Scheme.

The Working Group of the Plg. Commission suggested that this scheme of stg. of B.E.S. may be given power priority in view of financial constraints.

8. *Statistics on Area Planning—(Rs. 4 00 lacs)*

For effective planned development policy formation and administrative control, Delhi requires a sound Statistical System, which provides comprehensive data in respect of a particular geographical area like District in a State and Tehsil in a District. Once the concept gains momentum, the entire system of collection, compilation and tabulation of statistics in respect of Delhi will undergo change. As and when comprehensive administrative units are formed or envisaged, then statistical system shall also undergo a change.

Keeping all these factors in view, a new plan scheme "Statistics on Area Planning" has been included in Eighth Plan 1992-97. The Scheme aims at :—

- (i) Introduction of Uniform Classification of Economic Activity.
- (ii) Adoption of uniform occupational classification by respective departments.
- (iii) To get the information already available in respect of one department re-tabulated according to the geographical divisions of the other departments.
- (iv) To assist departments in adopting the concept of Uniform Administrative Districts/Zones/Sub-Districts/Sub-zones etc.
- (v) Systematic preparation of basic frame like systematic numbering of Roads, Streets, Houses and their nomenclature.
- (vi) Providing guidance to the various agencies including convening of data users conference (of the departments), before large scale information is collected at the time of renewal of ration cards, revision of Electoral Rolls, conduct of Population Census etc., so that as and when proper comprehensive districts are formed, essential data for administrative and developmental purposes is readily available.

- (vii) Assist departments in the improvement of performance according to which information is being collected, (so that it could be fruitfully analysed and utilised by other departments also) analysing their systems of collection of data and utilisation of computer facilities.
- (viii) To advise various agencies in the matter of collection of statistics.

To implement this scheme, first task will be to study the present notional geographical divisions of Delhi done by various user departments of Delhi Administration and Local Bodies and re-divide the entire area of Delhi in small and uniform harmonious segments keeping in view the administrative needs of the user departments. Simultaneously common nomenclature and formats for collection of statistical data will be introduced, so that information being collected by one department could be usefully used by other departments and cost of collection of information is reduced. The B. E. S. has made a small beginning by retabulating available statistical information like Hospitals, Colleges, Cinemas, Police Stations, Fire Stations etc. according to 14 Municipal Zones.

For entire planning and smooth functioning of the Scheme following posts are proposed for creation during Annual Plan 1992-93 :—

S. No.	Name & Scale of the Post	No. of Posts
(i)	Asstr. Director Rs. 2200-4000	1
(ii)	Punch Supervisor Rs. 1400-2300	1
(iii)	Stat. Assistant Rs. 1400-2300	1
(iv)	Data Entry Operator Rs. 1350-2200	2
(v)	Peon Rs. 750-940	1
Total :		6

The Unit will further be strengthened during Eighth Five Year Plan 1992-93 and Annual Plan 1992-93 with the creation of following posts :

S. No.	Name & Scale of the Post	No. of Posts
(i)	Joint Director Rs. 3000-5000	1
(ii)	Research Officer Rs. 1640-2900	1
(iii)	Cartographer Rs. 1640-2900	1
(iv)	Senior Stenographer Rs. 1400-2300	1
(v)	Stat. Assistant Rs. 1400-2300	2
(vi)	Driver Rs. 950-1500	1
Total :		7

An outlay of Rs. 4.00 lacs has been approved for 8th Plan which includes Rs. 0.40 lac for 1992-93.

9. *Excise and Entertainment Statistics Cell—(Rs. 1.00 lac)*

Presently there is no statistical cell in the Excise and Entertainment departments like other public dealing departments viz. Dte. of Transport, Sales Tax Deptt., Industry Deptt. etc.

Great difficulty is being experienced for want of proper Statistics on Excise and Entertainment and the data are mostly demanded by Research Workers, Administrators, Planners etc.

To collect, compile and analyse the data relating to excise revenue, excise offences, consumption of liquor/other intoxicants etc. and entertainment and betting tax collections assessment etc. it is felt that there should be a 'Nucleus Statistical Cell' which will work in Excise department. This is being proposed by Bureau of Economics & Statistics as Bureau is the Nodal Agency for co-ordinating statistical work in Delhi.

To start the work, following posts are proposed to be created during Annual Plan 1992-93.

S. No.	Name & Scale of the Post	No. of Posts
(i)	Asstt. Director Rs. 2200-4000	1
(ii)	Stat. Assistant Rs. 1400-2300	1
(iii)	Stenographer Rs. 1200-2040	1
(iv)	L.D.C. Rs. 950-1500	1
(v)	Peon Rs. 750-940	1
Total		5

Out of these posts the Working Group of the Planning Commission recommended for the creation of one Research Officer and two Statistical Assistants.

The approved outlay for the scheme in the 8th Plan is Rs. 1 lac out of which Rs. 0.40 lac is provided for 1992-93 Annual Plan.

Social Statistics Division

The following four Schemes have been covered under this Division :—

- (a) Environment Statistics Cell.
- (b) Establishment of Cultural Stat. Cell.
- (c) Women & Children Stat. Cell.
- (d) Housing Statistical (HQ) Cell.

The Working Group of the Planning Commission has recommended the following staff structure for Social Statistics Division :—

1. Asstt. Director	1
2. Research Officer	1
3. Stat. Asstt.	2
4. Typist	1

Total	5

10. *Environment Statistics Cell—(Rs. 1.00 lac)*

Environment Statistics are concerned with the stocks and flows of elements that have pivotal role in the understanding of the environmental phenomenon and assessing the environmental conditions and thus formulating policies to control/counter or avoid any kind of negative environmental impact.

Collection of Environment Statistics on regular and continuous basis envisage to collect statistics for the following parameters of environment :—

- (i) Land resources and use (structure of use categories) ;
- (ii) Energy and Mineral resources and use ;
- (iii) Water resources and use ;
- (iv) Fauna and Flora (Population and diversity of wildlife and vegetation) ;
- (v) Air quality (emission and immission of selected pollutants) ;
- (vi) Water quality (emission and immission of selected pollutants) ;
- (vii) Soil quality ;
- (viii) Solid and hazardous wastes excluding radio-active waste ;
- (ix) Radiation (emission and concentration) ;
- (x) Noise levels ;
- (xi) Environmental effects of demographics developments, production, transport and consumption activities not covered elsewhere ;
- (xii) Environmental protection and control measures (conservation of natural and other resources treatment recycling and disposal of waste) etc.

This is a new area of statistics. In the first stage, different agencies will have to be located, which will be responsible for the collection of different types of environment statistics. Formats for the collection of data will have to be designed and standardised.

The Environment Statistics Cell is proposed to be established during Annual Plan 1992-93 with the creation of following posts :—

S. No.	Name & Scale of the Post	No. of Posts
1.	Asstt. Director (Rs. 2200-4000)	1
2.	Jr. Stenographer (Rs. 1200-2040)	1
3.	Stat. Assistant (Rs. 1400-2300)	2
	Total	----- 4 -----

Rs. 1.00 lac is provided for the 8th Plan which includes Rs. 0.10 lac for 1992-93 to take up the Scheme.

11. Establishment of Cultural Statistics Cell—(Rs. 1.00 lac)

Cultural statistics is one of the newly emerging areas in the field of official statistics. The Ninth Conference of Central and State Statistical Organisations held at New Delhi during 15-19th March, 1990 recommended that development of cultural statistics, needs special attention. Accordingly, the Bureau of Economics & Statistics intend to set up a Cultural Statistics Unit during the Eighth Five Year Plan 1992-97.

Initially, it is proposed to set up the unit with the following staff during the Annual Plan 1993-94 :—

S. No.	Name of the Post	No. of Posts
1.	Asstt. Director (Rs. 2200-4000)	1
2.	Stat. Assistant (Rs. 1400-2300)	2
	Total	3

The Unit will identify the area and scope of cultural statistics and also evolve suitable mechanism for its collection systematically and scientifically. The Unit will also see the possibility of building up of a director of cultural organisation, cultural facilities and artists in Delhi. System for regular registration of all professional and amateur artists will be established. Other works like surveys to collect cultural statistics, pilot study of a few selected private archival institutions, publishing cultural statistics regularly will also be taken in hand.

An amount of Rs. 1.00 lac has been approved for 8th Plan which includes Rs. 0.10 lac for 1992-93.

12. Statistics of Women and Children Cell—(Rs. 1.00 lac)

As per population Census, 1991, the total population of Delhi was 93.70 lakhs out of which women were 42.50 lakhs. Children upto the age of 19 years constituted about 10.0 percent of the Delhi's total population. Though women constitute about 45 percent of the total population, their economic and social position and status is inferior to men. Children are the most important national resources for human development.

The responsibility of implementing welfare and development programme for women and children is shared between the Centre and State Governments. This requires essential and relevant information or statistics relating to women and children. Various conference of Central and State Statistical Organisations stressed the need to collect and maintain statistics of women and children.

The statistics on women and children proposed to be collected are sex ratio, live births, infant mortality by sex, child mortality by sex, mortality at higher ages by sex, maternity deaths, life expectation at birth and higher ages, survival ratios, incidence of sickness in various age groups by nature of sickness, marital status, age of marriage, maternity, fertility abortions, miscarriages, female family planning methods, Maternity & Child Services, enrolment in education, non-formal adult education, vocational and

technical trainings, facilities or creches for children, social security, women's welfare activities, employment and unemployment, child labour etc. Necessary forms and schedules will also be designed by the proposed unit.

It is proposed to set up a separate Cell to collect statistics of women and children in the Eighth Five Year Plan 1992-97. It is proposed to implement the scheme from Annual Plan 1993-94 with the creation of following posts :—

(i) Asstt. Director	(Rs. 2200-4000)	1
(ii) Research Officer	(Rs. 1640-2900)	1
(iii) State Asstt.	(Rs. 1400-2300)	2
(iv) Stenographer	(Rs. 1200-2040)	1
Total :		5

Rs. 1.00 lac is provided for 8th Plan out of which Rs. 0.10 lac is for 1992-93.

13. Housing Statistics Cell—(Rs. 2.00 lacs)

At the national level, National Building Organisation is the Nodal Agency for collection and compilation of building statistics. It launched a Three Tier Scheme in 1963 for collection of relevant statistical information. It envisaged to set up first tier statistical cell in Public Works Department and second tier cell in Local Self Govt. Department for collection of housing statistics in respect of local bodies. The third tier was suggested for the H.Q. Cell in the State Bureau of Economics & Statistics.

A two tier Housing Statistics Cell has been proposed for Delhi. According to this scheme, first tier will consist of the Statistics Cell already established in Land & Building Department. It will collect & compile housing statistics in respect of PWD only. Under second tier, a H.Q. Housing Statistics Cell is to be established in the Bureau of Economics & Statistics for collection of information in respect of Public Sector i.e. DDA, Railways, Defence, CPWD and Local Bodies, Research Institutions, Universities etc. Creation of the following posts has been envisaged during the 8th five year plan.

S. No	Name & Scale of the Post	No. of posts
(i)	Asstt. Director (Rs. 2200-4000)	1
(ii)	Statistical Asstt. (Rs. 1400-2300)	4
(iii)	Jr. Stenographer (Rs. 1200-2040)	1
(iv)	Peon (Rs. 750-940)	1
Total		7

An outlay of Rs. 2 lacs is approved for the 8th Plan including Rs. 0.10 lac in the Annual Plan 1992-93.

Special Sample Survey Division :

Under this Division the following 3 Schemes are covered :

- (a) Research & Development Unit.
- (b) Rural Statistics Cell.
- (c) Special Survey Cell.

The Working Group of the Planning Commission has recommended the staff structure for this division as under :—

1. Deputy Director	1
2. Asstt. Director	1
3. Research Officer	1
4. Stat. Assistant	4
5. Field Investigators	12
6. U.D.C.	1
7. L.D.C.	2
8. Steno	1
9. Chowkidar	1
Total	24

14. *Research and Development Unit—(Rs. 1.00 lac)*

BES is the Nodal Agency not only for development of an efficient statistical system in Delhi but also to coordinate various statistical activities. Every year Bureau is receiving lot of statistical/economic data and information being published by Government Sector both from different States and the various Ministries of Government of India. Besides, information is being received from Research Organisation, Autonomous Bodies and also private sector. These publications contain useful information regarding Delhi as also developmental activities around Delhi having a direct bearing on the Economy of Delhi as well as quality of living in Delhi. Such information, if collected and compiled for Delhi, will be very useful. For this purpose a Research & Development Cell may be set up in the Bureau of Economics & Statistics during the Eighth Five Year Plan (1992-97) to carry out of the following functions :

- (i) To explore the possibilities of setting up 'Statistical Units' in departments where no unit functions and suggest statistical coverage.
- (ii) To undertake problem oriented research and analytical studies based on the data available as administrative by product.
- (iii) To study the statistical techniques being applied in similar fields by other states and Central Statistical Agencies and try to present information in a uniform pattern with adjoining states.
- (iv) To study and analyse the statistical publications from various States, Central Statistical Organisation, Govt. of India Offices and Departments of Delhi Administration received in the Library of B. E. S.
- (v) To compile Systematic Information in respect of various activities.
- (vi) To present information in the form of Brochures, Reports, Minutes of Meetings, Recommendation of Conferences, Surveys etc.

The above work is proposed to be taken up in Annual Plan 1992-93 with the creation of following posts.

S. No.	Name & Scale of the Post (Rs.)	No. of Posts
1.	Asstt. Director (2200-4000)	1
2.	Stat. Assistant (1400-2300)	2
3.	Stenographer (1200-2040)	1
Total		4

Rs. 1.00 lac is provided for the 8th Plan 1992-97 which includes Rs. 0.10 lac for 1992-93.

15. Rural Statistics Cell—(Rs. 1.00 lac)

The Administration is not collecting information needed for planning and development of rural areas in the proformas suggested by the Working Group on 'Small Area Dev. Programme Statistics' and National Informatics Centre of Planning Commission. In the absence of basic data, formulation of suitable Plan Schemes by the departments/agencies concerned becomes difficult. The jurisdiction of a Patwari or VLW is about 3 to 4 villages and they are busy in their own way not having much time left specifically for statistical work.

It is, therefore, proposed to set up a cell in the BES specifically for collecting Rural Statistics in respect of the following items :—

1. Land utilisation;
2. Registration of Births & Deaths;
3. Identification of the unemployed and under-employed persons trade-wise;
4. Identification of children not attending school;
5. No. of Dispensaries/Health Centres/Veterinary Hospitals;
6. Numbering of houses in a uniform way to keep record for pucca, semi-pucca and pucca and kaccha buildings;
7. Availability of :—
 - (i) Industries;
 - (ii) Community facilities;
 - (iii) Tubewells;
 - (iv) Cooperative Bank/Agr. Bank/Nationalised Bank;
 - (v) School/College in the Village;
 - (vi) Transport facilities;
 - (vii) Kendriya Bhandar/Supcr Bazar/Fair Price Shops etc.
 - (viii) Sanitary facilities;
 - (ix) Creche/Day Care Centre;
 - (x) Fertilisers/Seeds to the Farmers;
 - (xi) Employment Exchange;
 - (xii) Daily Newspapers etc; and
8. Other items of National Informatics Centre Network proformae not covered above.

The Rural areas of Delhi are divided into five Blocks viz. (a) Alipur (b) Najafgarh (c) Mehrauli (d) Shahdara (e) Kanjhawala. The Cell will initially be set up in one block only during the Annual Plan 1993-94. The remaining Four

Blocks are proposed to be covered during the last three years of the Eighth Plan 1992-97 as under :—

(i) 1993-94	—One
(ii) 1994-95	—One
(iii) 1995-96	—Two
(iv) 1996-97	—One

Following staff is required to implement this scheme during Annual Plan 1993-94 i.e. for one Block :—

Sl. No.	Name & Scale of the Post		No. of Posts
		Rs.	
(i)	Research Officer	1640-2900	1
(ii)	L.D.C.	950-1500	1
(iii)	Stat. Assistant	1400-2300	2
(iv)	Data Entry Operator	1200-2040	1
(v)	Peon	750-940	1
Total :			6

An amount of Rs. 1.00 lac is provided during 8th Plan. Out of which Rs. 0.10 lac is for 1992-93.

16. Special Survey Cell—(Rs. 3 00 lacs)

At present, there is no Survey Cell to conduct ad-hoc studies in the process of plan formulation/development. So far studies were being conducted through other agencies as and when needed. During the past few years, studies were conducted through National Institute of Public Finance and Policy in respect of Sales Tax, Terminal Tax, House Tax and Freedom Fighters through Teachers. A survey was conducted in the Informal Sector through Institute of Marketing and Management. In fact, there is need to conduct a number of other surveys in different fields for reliable estimates to be used in policy making. The various subjects that need continuous studies are poverty line particularly urban poverty, colonies, family planning, distributive character of trades, registration of births and deaths etc. in Delhi.

The following posts were created under the GOI scheme "conduct of Third Economic Census 1990" in Delhi :—

(i) Asstt. Director	(Rs. 2200-4000)	1
(ii) Research Officer	(Rs. 1640-2900)	2
(iii) Stat. Asstt.	(Rs. 1400-2300)	2
(iv) L.D.C.	(Rs. 950-1500)	1
Total :		6

These posts are required for the Special Survey Cell.

A sum of Rs. 3.00 lacs has been approved for the 8th Plan 1992-97 which includes Rs. 0.10 lac for 1992-93.

17. Construction of Sankhiki Bhawan—(Rs. 1.00 lac)

Against the requirements of about 1000 Sq. metres (as per norms fixed by Govt. of India) the BES has been allocated only 486 Sq. meters of covered areas which is grossly inadequate for proper functioning of the Staff.

Besides the general shortage of accommodation for sitting arrangements of the staff, there is no Committee/Conference Room and space for other amenities. In fact, till now the BES has been unable to conduct regular Training Courses, Seminars and Group discussions due to non-availability of suitable space in the BES. Provision of these will bring congenial atmosphere and increase efficiency.

There is an overall shortage of accommodation in the various offices of Delhi Administration. So BES is not likely to get additional accommodation till new buildings are constructed. Therefore, to meet long term space requirements, there is no alternative but to build BES's own office accommodation.

It is estimated that a plot of land and construction of a building will cost about Rs. 35.00 lacs which will be needed in phases. To initiate the work, a token provision of Rs. 0.10 lac is approved in Annual Plan 1992-93. For Eighth Five Year Plan 1992-97, a token provision of Rs. 1.00 lac is approved under capital head of construction of Sankhiki Bhawan and other space if allotted in the Old Sectt. or somewhere else etc.

18. Setting up of Computer Centre—(Rs. 5.00 lacs)

The "State Level Computer Centre" was set up by the National Informatic Centre at 1, Kripa Narain Marg, Delhi. ND-550 System was installed in the State Level Computer Centre. This scheme has spilled over from the 7th Plan.

The Planning Department is using the Computer Centre for the preparation of Monthly and Quarterly Progress Reports of Plan Schemes and the Statements of approved outlay and RE etc. Other user Departments are Principal Pay & Account Offices, Industries Department, BES and Cooperative Department.

During the Eighth Five Year Plan 1992-97, it is proposed to strengthen the infrastructure facilities of the Computer Centre.

Capital Head

The present accommodation for the Computer Centre is not adequate even to accommodate the staff of NIC working at the State Level Computer Centre. As per the requirement, 3000 sq. feet is needed but only about half of the accommodation is available at present. In the Eighth Plan it is proposed to acquire/build 3-4 more rooms adequately renovated as per the needs and standards of the Computer Centre. About Rs. 10.00 lacs will be required for this purpose. Additional accommodation is also needed for the additional posts proposed to be created under this scheme during the Eighth Plan period.

Revenue Head

During the Eighth Plan period it is proposed to set up a 'Separate Unit' under the Planning Department comprising the following staff for co-ordination and administrative supervision work with the already established NIC State Level Computer Centre and the user Departments/Agencies of Delhi Administration. This unit will take

follow up action/monitor the computerisation programmes of various Departments/Agencies of Delhi Administration. Other activities will include preparation of budget, processing of proposals for expenditure sanctions, organisations of meetings and other related works etc. To meet the growing financial needs a separate Budget Head was opened for a 'Computer Centre' during the Seventh Plan period.

The posts proposed to be created are the following :—

S. No.	Name of the Post	Pay Scale Rs.	No. of Posts
1.	Asstt. Programmer	1640-2900	1
2.	Data Entry Operator	1200-2040	2
	Total		3

To provide mobility to the staff for visiting various departments of Delhi Administration and GOI provision for purchase of a vehicle is included in the proposal. However, the Working Group of the Planning Commission suggested that the proposal for additional staff and purchase of vehicle may be deferred for the time being.

A sum of Rs. 5 lacs has been approved during 8th Plan 1992-97 which includes Rs. 1.00 lac for 1992-93.

II. Sales Tax Department

I. Strengthening of Data Based Management Systems—(Rs. 125 lacs)

The scheme aims at :

- (i) Collection of statistics for monitoring, control and policy formulation.
- (ii) Conduct of empirical studies of samples as aids to policy formulation.
- (iii) Entry and verification of data for storage in EDP systems.
- (iv) Plugging leakage of revenue by verifications of claims for exemptions and concessional levy of S.T.
- (v) Plugging leakage of revenue by scrutiny of accounts of utilisation of statutory forms.
- (vi) Plugging leakage of revenue by reconciliation of claims of payments of Sales Tax into Govt. office.
- (vii) Plugging leakage of revenue by monitoring the furnishing of returns.
- (viii) Monitoring and control of inspections, assessment and disposal of applications.

Sales Tax Deptt. has been implementing two plan Schemes viz 'Strengthening of EDP Cell' and Strengthening of Statistical System of network in Sales Tax wards, since the Sixth Five Year Plan. Both these schemes are complementary with the same objective of Computerisation of Sales Tax records for creation and maintenance of data bases as an aid in the administration and implementation of laws relating to Sales Tax. Both the schemes have been clubbed to operate it as a unified schemes with changed nomenclature.

The scheme was taken up in the Sixth Five Year Plan on the recommendation of Staff Inspection Unit. Govt. of India for computerisation of Sales Tax data. To implement the scheme the deptt. engaged Computer Maintenance Corporation (CMC) in 1978-79 and the feasibility study by CMC recommended the following nine-applications for Computerisation :—

1. Return and Treasury Challan handling system.
2. Dealer to Dealer cross checking of exemption claims.
3. Sales and purchases analysis.
4. Assessment scheduling and monitoring system.
5. Inspection scheduling and monitoring system.
6. Accounting and follow-up system.
7. Application handling system.
8. Forms control system.
9. Statistics.

7th Plan 1985-90 and Annual Plans 1990-91 & 1991-92.

Against the approved outlay of Rs. 64 lacs an exp. of Rs. 42.25 lacs was incurred during 7th Plan.

The work relating to preparation of a dealers directory was finalised. It is also being updated constantly. Besides, about 9 lacs Tax Challans per annum received from R.B.I. were processed monthly for reconciliation of tax collections and monitoring of ward-wise revenue collection/shortfall of revenue. In addition ward-wise report on tax or payments made was prepared for verification of tax receipts.

During 1990-91 exp. of Rs. 9.73 lacs was incurred under the scheme.

During 1991-92 it was proposed to extend the EDP set up including setting up of a main-frame computer inter-linking all the wards to decentralise data processing and creation of a statistical net-work in wards. But due to the non-filling of senior level technical posts and delay in the notification of various statutory formats, which provides input to various Computerised Systems, it was decided to defer the procurement and installation of the main-frame Computer by a year. An amount of Rs. 10.88 lacs was spent during 1991-92 for other programmes under the scheme.

Programme for Eighth Plan 1992-97 and Annual Plan 1992-93

The feasibility study in the deptt. was carried out by CMC in 1979-80 and since then a lot of changes have taken place in the system of tax collection. The National Informatic Centre (N.I.C.) was requested to examine and update the report of CMC keeping in view the following aims and objectives of the computerisation programme of the Deptt.

- (i) Providing a concise and concrete database of Dealers & their tax liabilities, assessing authorities and their wards.
- (ii) Ensuring smooth flow of work and eliminating unnecessary delays.
- (iii) Keeping the top management well informed by generating timely reports.
- (iv) Improved tax collection.
- (v) Eliminating the existing loopholes in the system.
- (vi) Motivated performance of the wards and staff.

The proposed New System

The N I C report has slightly modified the various systems proposed by C M C. The revised systems can now be classified into seven modules. Which are independent of each other and the implementation of these systems can be effected in a phased manner. The 7 modules are :—

1. Dealer Endorcement system.
2. Returns processing system.
3. Forms control system.
4. Assessment information system.
5. Dealer monitoring system.
6. Decision support system.
7. Expert system.

Out of the seven applications mentioned above, the first three applications are being implemented as a pilot. project in Zone-V consisting of wards 33-36. A new Computer Super PC/AT-386 with 8 terminals has been procured and installed connecting all the four wards. After the testing of the software in the pilot wards the proposed systems will be extended to all other zones in the Eighth Plan period.

Equipment required

During the Eighth Plan period it is proposed to extend the project in all the zones to decentralise the entire data processing activity and create a local area net work. There are two options to extend the programme to all the wards. The first option is to set-up a small PC-based systems in all the Zones and link them to create a Local Area Net-work. The other option is to instal a main-frame system with an appropriate back-up system and connect them through terminals. Final recommendations, in this respect are to be made by NIC who are the technical consultants to the Deptt. However the financial expenditure on both these options are broadly the same.

Maintenance of equipment

For maintenance of the equipment i.e. Computer and Computer Peripherals an amount of Rs. 15 lacs has been kept for the first year of the Eighth Plan. Besides, an amount of Rs. 2.00 lacs have been provided for the purchase and maintenance of Air Conditioners for the first year of the Eighth Plan.

Site preparation/Cabling

Proper site preparation in all the zones will have to carried out before installation of the equipment. Therefore an amount of Rs. 10.00 lacs has been proposed for site preparation/Cabling work, etc. wherever needed.

Purchase of uninterrupted Power Supply (UPS) Unit

To provide a battery to the systems back-up a UPS Unit of 10 KVA capacity will be required. A diesel generating plant will have to be installed to ensure power supply to the EDP set up. Accordingly a provision of Rs. 5.00 lacs in each of the year 1992-93 and 1993-94 for the purchase of a UPS and installation of a Diesel Generating Set has been made.

Man-Power requirement

To coordinate, technically guide, supervise and provide liaison with the zonal ward functionaries one post each of EDP Manager (Rs. (3700-5000) and System Analyst (Rs. 3000-4500) was created during 1989-90. Budget provision for the salary of these posts during the 8th Plan has been made. The posts are likely to be filled up during 1992-93.

The entire work of data processing and production of various reports will be attended to by the Central EDP Cell. Two additional posts of System Analysts (Rs. 3000-4500) and two posts of Programmers (Rs. 2200-4000) will be necessary to handle system analysis, design and program development, and to coordinate the work of the different zones. System Analysts assisted by Programmers will be responsible for the implementation of one-two application in all the zones. To maintain cleanliness in the EDP, set up 5 posts of Sweepers have been provided. The schemes includes creation of the following additional posts in 1993-94 :—

Sl. No.	Post	Scale	No.
1.	System Analyst	3000-4500	2
2.	Programmer	2200-4000	2
3.	Console Operator	1640-2900	2
4.	Sweepers	750-940	5

Action Plan

The extension of the computerisation programme to the whole Deptt. has the following distinct phases :—

1. Reformatting of the existing forms to make them more computer friendly and introduction of new forms to provide input data for the recommended computerised system.
2. Recruitment of senior level technical staff already sanctioned.
3. Identification of the hardware/procurement/installation and training of staff.
4. Collection and feeding of master data.
5. Testing/implementation of software.
6. Introduction of the following computerised systems in order of their priority :
 - (i) Dealer Endorsement System;
 - (ii) Return Processing System; and
 - (iii) Forms Control System.

It is expected that the reformatting/introduction of new forms, evaluation of the pilot-project and recruitment of the senior technical staff, identification of the hardware may be completed during 1992-93.

The second integral part of the Plan Scheme pertains to strengthening and management of important statistics and records, maintenance, compiling, updating important

14 registers such as Demand and Collection Register, Arrears Register, Stay Register, Appeal Register, Returns Defaulter Registers, Return Receipt Register, Refund Register, Amendment Register etc. in the wards. In order to have accurate data and better and efficient management of statistical records and the vital registers in the wards and zones which have direct bearing on the revenue collections, recovery etc. The R&S Branch of the Deptt. submitted a proposal to the Finance and Planning Deptt. for creation of 110 posts of Statistical Investigators for posting in the wards, zones and at the Head Quarter. After discussions in the Plg., Finance Deptt. and Sale Tax Deptt. it was decided that the original proposal for creation of 110 posts of Statistical Investigators should be amended suitably to 90 posts of Statistical Investigators (pay scale 1200-2040), 10 posts of Statistical Assistants (pay scale 1400-2300) and one post of Research Officer (pay scale 1640-2900). During 1991-92 50 posts of Statistical investigator, 10 posts of Statistical Assistant and 1 post of Research Officer were created. Some posts were filled up.

Taking into consideration expansion of the Deptt. and Sales Tax Wards from 50 to 110 or so, the following posts for strengthening of R&S Branch are proposed for 1992-93 under the 8th Five Year Plan.

S. No.	Name of Post	No. of posts	Scale of pay
			Rs.
1.	Statistical Asstt.	2	1400-2300
2.	Progressive Asstt./ Statistical Investigator	2	1200-2040

The number of registered dealers has been increasing consistently i.e. about 4.5% every year. The detailed information on monthly basis has to be collected, compiled, updated analysed and presented to the higher authorities in respect of these dealers by the R&S Branch. Secondly the department is deficient in respect of commodity-wise information of dealers as well as tax collected, turnover-wise dealer's information dealing in various commodities which are vital from the policy formulation point of view. Some of the annual reports received from the other States, for instance, West Bengal, indicates that they have been collecting commodity-wise information which is very useful for planning and policy formulation. This information can only be collected, compiled and analysed if the additional four posts mentioned above are created during 1992-93. The proposal for expansion of wards from 50 to 110 has also been accepted by the Administration keeping in view the norms laid down by the staff inspection unit of Govt. of India that against 1000 dealers there should be one ward. Thus the additional work could be handled if the proposed posts are sanctioned during 1992-93.

The implementation of the scheme in 8th Plan will not only make the Data Management efficient and effective but will lead to updating, computerising and interpolating of retrieved Data which will provide sufficient aids to increase the revenue collection by leaps and bounds. This will assist the top Management to control all the liverages and linkages in the Deptt. so as to monitor its function closely and effectively and adopt suitable, corrective and progressive measures, wherever and whenever required, to raise the revenue collection for financing the process of planning in the Union Territory of Delhi. A additional funds are required to implement the scheme during the 8th Plan period.

In the Annual Plan 1992-93 provisions for purchase of 10 PC/XT, 15 air-conditioner, furniture, telephone, maintenance of equipments, stationery, salary of staff etc. is made under the scheme.

The purchase of PC's are primarily meant to create computer awareness before a main-frame computer is set up during 1993-94 to computerise all major activities of the Department,

To implement the scheme, a sum of Rs. 125 lacs has been approved for the 8th Plan 1992-97 which includes Rs. 38 lacs for 1992-93.

XIII—CIVIL SUPPLIES

Schemes for promotion and propagation of consumers' interest, awareness and consumer education for their rights through mass media, assistance to voluntary agencies engaged in consumer movement and strengthening of public distribution system are included in this sector.

7th Five Year Plan 1985-90 and Annual Plans 1990-91 and 1991-92.

Against the original approved outlay of Rs. 10 lacs under this sector, an expenditure of Rs. 87.67 lacs was incurred in the 7th Five Year Plan. The increase in expenditure was due to taking up of three more schemes in the 7th Plan. The details of expenditure are as under :—

(Rs. in lacs)

S. No.	Schemes	Expenditure		
		7th Plan 1985-90	Annual Plan 1990-91	Annual Plan 1991-92
1.	Dte. of Consumer Affairs	23.46	—	—
2.	Setting up of Distt. Forums and State Commission	14.18	—	—
3.	C/o Infrastructure for DSCSC to strengthen PDS	50.00	—	—
4.	State Youth Award for Consumer Protection.	0.03	—	—
5.	Assistance to voluntary organisations, publicity etc.	—	4.50	4.48
TOTAL :		87.67	4.50	4.48

In order to redress the grievances of the consumers in Delhi, one District Forum and one State Commission were set up during the 7th Five Year Plan. Against the approved outlay of Rs. 5 lacs during 1990-91 the expenditure incurred was Rs. 4.50 lacs. In 1991-92 the expenditure incurred was Rs. 4.48 lacs. On the advice of the Planning Commission, Delhi Administration transferred the liability of schemes for State Commission and District Forums to Non-Plan side in the financial year 1991-92. So far the Administration has not been able to normalise expenditure on this scheme on Non-Plan side. On the other hand the Supreme Court of India has directed the Central Government and the Delhi Administration to fulfil Statutory obligations under the Consumer Protection Act or face contempt charges. The Department needs nearly 39.95 lacs to implement the directions of the Supreme Court.

8th Five Year Plan 1992-97 and Annual Plan 1992-93

The approved outlay for 8th Plan 1992-97 and Annual Plan 1992-93 is given below :—

		(Rs. in lacs)	
		Approved Outlay	
S. No.	Name of Scheme	8th Plan 1992-97	Annual Plan 1992-93
1.	Assistance to voluntary organisations, publicity etc.	30.00	5.00
2.	Stg. of Public Distribution system	55.00	10.00
3.	Modernisation of Food & Supplies Deptt.	15.00	5.00
TOTAL :		100.00	20.00

The scheme wise details are as under :—

1. *Assistance to voluntary agencies engaged in Consumer Movement and Publicity (Rs. 30 lacs)*

Consumer Protection Act was passed in the year 1986. The Central Consumer Protection Council as also Delhi Consumer Protection Council have been emphasising the need to provide financial assistance to the non-governmental organisations engaged in the consumer movement. It has also been emphasised that the Directorate of Consumer Affairs should take steps to propagate consumer rights and consumer education through mass media such as Press, TV Coverage and production of video cassettes. It is also felt that the Directorate of Consumer Affairs should increase subject related seminars and conferences. During the Annual Plan 1991-92 an expenditure of Rs. 4.48 lacs was incurred. To implement the Scheme, Rs. 30 lacs for 8th Plan 1992-97 and Rs. 5 lacs for 1992-93 has been approved.

2. *Strengthening Public Distribution System in Delhi—(Rs. 55 lacs)*

The main objective of the scheme is to strengthen the public distribution system by increasing the number of circle offices from 44 to 70 to supervise and control the increased number of fair price shops for the growing population of Delhi. It also envisages decentralisation of the Administration by creating 9 zonal offices during the 8th Plan period.

The Public Distribution System has been working under considerable stress and strain. The Population of Delhi has been increasing at the rate of nearly 3 lacs per year. More areas are getting urbanised. The consumers i.e. Food Card Holders have to travel long distances to procure food articles. In 1984, Delhi Admn. introduced door to door step delivery system to check diversion of food articles on one hand and to save retail outlets from going to FCI godowns frequently which was identified as a cause for shops remaining closed when they were supposed to remain open. Frequent changes in prices of commodities in open markets has also been increasing the reliance on PDS. This has increased demand on policing arrangements and effective market intervention as a control system to check rising trends in prices. Delhi Administration has a proposal to build critical storage capacity and Circle Ration Offices, as it is being threatened with eviction proceedings at the hands of landlords.

Essential commodities like wheat, rice edible oils, sugar, coal and kerosene oil are distributed through Public Distribution System. There are at present 25,35,149 food cards with 1,25,76,643 units issued to residents of Delhi. At present, Deptt. is having 3580 FPSs, 1876 Kerosene Depots and 960 Coal Depots. It is anticipated that by the end of current decade there will be about 30 lacs food-cards with 1.55 lacs units. Anticipated annual growth for food cards and units is 90,000 and 3 lacs respectively. By the end of 8th Five Year Plan there would be 28 lacs food cards and 1,32,00,000 units. There would be the need of 4300 fair price shops by the end of 8th Five Year Plan.

With the increase of population in Delhi and issue of food cards to juggi dwellers the work of department has increased manifold. In addition to running and operating the public distribution system, the Department is operating as a licensing authority for various notified essential commodities on free sale. From time-to-time the deptt. has to take anti-hoarding measures to keep their prices under check. The department has to strengthen and to gear up the Administrative set-up to meet the challenges posed by the additional work created. A Smooth and effective administrative set-up is required in each department. The need to strengthen the Deptt. has been recognised.

At present the Food and Supplies department is managing the PDS system through its 3580 fair price shops, 1876 K. Oil Depots and 960 Coal Depots. The number of these outlets are likely to increase to 3720 by the end of 1992-93 and 4300 FPSs by the end of 8th Five Year Plan 1992-97. For supervising and controlling the existing FPSs there are 44 Circle Offices which are grossly inadequate. As such additional circle offices and posts are required.

(a) Posts created for additional Circle Offices

During the Annual Plan 1991-92 the following posts were created alongwith the enhancement of Circle Offices from the existing 44 to 61.

S. No.	Posts	No. of Posts
1.	Assistant Commissioner	6
2.	Food and Supplies Officers	20
3.	Superintendent	6
4.	Inspectors	34
5.	Head Clerk	17
6.	UDC	8
7.	LDC	46
8.	Stenographers	6
9.	Peon-cum-Chowkidar	17
10.	Sweeper-cum-Chowkidar	6
11.	Peon	6
Total :		172

The case for filling up of these newly created posts has already been taken up with the Services Deptt. and is likely to be filled up during 1992-93.

In view of the anticipated rate of growth of population and the number of Fair Price Shops, it is felt that 61 circle offices will not be sufficient. Hence it is proposed to increase the circle offices to 70 by adding 9 more circle offices to manage 4300 FPS by the end of 8th Plan. It is suggested that one zone should not have more than 8 circles for effective administration of PDS system and there should be one officer for 8 circles.

(b) Decentralisation of Administration

It has become very difficult to serve the Food Card Holders, Retail outlets and to police the entire area from a single Headquarter establishment. Management of PDS from the HQs is viewed undesirable as consumers and retail outlet dealers have to travel unnecessarily in the congested roads of Delhi. Hence it is proposed to decentralise the Headquarters establishment on the pattern of MCD Zones. The proposal for creating 6 Zonal Offices on MCD's pattern was approved during 1991-92 by L. G. This is likely to be implemented during 1992-93. This has worked well in many states. Zonal office would be manned by a zonal officer at the level of Asstt. Commissioner. One Supdt., one Head Clerk, one UDC, four LDCs, 2 Peons and two Sweeper-cum-Chowkidar are being provided in zonal office. During the 8th Five Year Plan 9 such Zonal Offices are proposed to be created out of which approval for creation of 6 zones was obtained during 1991-92.

(c) Creation of New Posts for Zonal offices and Circle Offices

It is proposed to create the following additional posts during the 8th five year plan.

S. No.	Posts	No. of posts
1.	Addl. Commissioner (F & S)	02
2.	Deputy Commissioner	02
3.	Asstt. Commissioner	01
4.	Food & Supplies Officer	06
5.	Superintendent	11
6.	Head Clerks/Gr.-II	61
7.	Inspector	17
8.	UDC	50
9.	LDC	16
10.	Stenographer	04
11.	Peon-cum-Chowkidar-cum-Sweeper	23
12.	Drivers	10
13.	Dy. Director (Stat.)	01
14.	Asstt. Director (Stat.)	02
15.	Statistical Officer.	08
TOTAL :		214

For the 8th Plan 1992-97 an outlay of Rs. 55 lacs has been approved. Additional funds will be required to meet the expenditure on account of salary and allowances of the already sanctioned 172 additional posts in the department. Outlays under the capital head will be required for establishing the Six Zonal Offices and 17 additional Circle Offices. The matter regarding the filling up of the newly created posts has already been taken up with the Services Deptt. and are likely to be filled up shortly. *The matter regarding finalisation of the boundaries of the enhanced 61 circle offices is also in the last phase and is expected to be implemented soon.* As such, additional funds under revenue on account of salary to the tune of approx. Rs. 30 lacs and Rs. 25 lacs under capital head will be needed for establishing/housing the newly created Zonal and Circle Offices in 1992-93 against the approved outlay of Rs. 10 lacs.

3. *Modernisation of Office (Rs. 15 lacs)*

Information regarding food cards, profile of retail outlets, allocations, lifting of stocks and supplies to the consumers, are in diverse form of statements and records. For taking managerial decisions, the data available is generally difficult to retrieve. As such it has been felt that the Department should have a Management Information System. Accordingly, it is proposed to computerise various activities in phases. Feasibility studies are being undertaken. A sum of Rs. 5 lacs has been provided in the Annual Plan 1992-93 for the feasibility studies. For the Eight Plan 1992-97, an outlay of Rs. 15 lacs has been approved.

XIV. OTHER GENERAL ECONOMICS SERVICES (REGULATION OF WEIGHTS & MEASURES)

1. Strengthening of Weights & Measures Organisation—(Rs. 50 lacs)

The department of Weights & Measures broadly deals with the following tasks :—

- (i) Verification and stamping of Weights & Measures and weighing & measuring instruments used in trade, commerce and industry.
- (ii) Re-calibration and calibration of auto-rickshaw and taxi meters.
- (iii) Grant of licences to all manufacturers, repairers and dealers of weights & measures, weighing and measuring instruments in National Capital Territory of Delhi.
- (iv) Enforcement of the Standards of Weights & Measures Act, 1976 and Standards of Weights & Measures (Packaged Commodities) Rules, 1977.
- (v) Enforcement of Standards of Weights & Measures (Enf.) Act, 1985 and Rules, 1988 made thereunder.
- (vi) Compounding of offences under the various sections of the Standards of Weights & Measures (Enf.) Act, 1985 and Rules, 1988 and the Standards of Weights & Measures Act, 1976 and (Packaged Commodities) Rules, 1977 made thereunder.
- (vii) Maintenance of Standard Laboratory for maintaining at Secondary & Reference Standards and verification of working standards as per provisions of the Act.
- (viii) Verification and stamping of domestic water meters at Standard Laboratory, Wazirpur under the Standards of weights & Measures (Enf.) Act, 1985.
- (ix) Verification and stamping of clinical Thermometers at Standard Laboratory of Weights & Measures (Enf.) Act, 1985.

Keeping in view the responsibilities assigned to this organisation, it is proposed to implement the following programmes so as to make the deptt. capable to deal with the workload during the 8th Five Year Plan (1992-97). An outlay of Rs. 50 lacs is approved for this programme for Eighth Five Year Plan which includes Rs 10 lacs for A.P. 1992-93.

(A) Setting up of Computer Cell at Headquarter—(Rs. 5.30 lacs)

The Standards of Weights & Measures Act, 1976 and the Standards of Weights & Measures (Enf.) Act, 1985 not only provide for the establishment and Enforcement of the Standards of Weights & Measures but also provide for better protection to consumers by ensuring metrological accuracy in commercial transactions, industrial measurements and measurements needed for ensuring public and human safety. Considering the interest of the consumers, the Weights & Measures laws have been made stringent and provision of deterrent punishment like imprisonment for the second and subsequent offence have been made. It is desirable to have an upto date record of offences committed by the traders in Petrol, Kerosene Oil, FPS, Coal Depots, Sweet Shops,

LPG and other trades. Apart from this it is also essential to have a record of manufacturers, dealers and repairers who deal in weights & measures only. Complete data regarding the auto-rickshaws and taxies are required for 'calibration & re-calibration'. Therefore, it is felt necessary to have a computer cell in the department with the following minimum staff at the initial stages :—

S. No.	Name of post	No.	Pay scale Rs.
1.	Asstt. Programmer/Console Operator	1	1640-2900
2.	K.P.O.	1	1200-2040

The approximate cost of a Personal computer will be about Rs. 2.00 lacs.

B. Strengthening of Taxi Meter Unit—(Rs. 6.00 lacs)

The Taxi Meter Unit is presently entrusted with the job of calibration/re-calibration of Fare Meters of both taxies and auto-rickshaws periodically once in a year. At present about 65,000 auto-rickshaws and 10,000 taxies are plying on the road in Delhi. With the increase in population the number of vehicles is bound to be enhanced by five thousand yearly during the 8th Plan period and by the end of the 8th Five Year Plan it is expected to have approximately one lacs vehicles which would need their fare meters to be re-calibrated.

The items required for re-calibration are Bench Test Machine/Stop Watches. The unit is now equipped with 11 Bench Test Machines and 15 Stop Watches of which 4 Bench Test Machines and 10 Stop Watches are not being used because they have become unserviceable due to normal wear and tear. The rest of the seven bench test machines also require immediate repair and proper services. To achieve the desired accuracy, it is very essential to have a perfect Bench Test Machines and other equipment. Therefore, the taxi meter unit requires to replace the old test bench in the first instance. On this account an amount of about Rs. 3.00 lacs is required. Apart from this, it is learnt that electronic fare meters are going to be introduced in the near future and to check the electronic meters, a suitable device will have to be purchased. To meet the cost of such a device, a provision of Rs. 3.00 lacs is has been made in the 8th Five Year Plan.

An amount of Rs. 6.00 lacs is therefore approved for VIII Plan—1992-97.

(C) Creation of a Special Cell at Head Quarters for consumer education and publicity—(Rs. 8.00 lacs)

Consumer protection and education have to be given high priority since the department is dealing in consumer protection laws. This programme has to be intensified so as to educate the consumers about their rights under the Weights & Measures Act, while making purchases from the traders. The department has also to educate and warn unscrupulous traders who indulge in nefarious activities about the strict provision of the laws through Press Advertisement, Radio and Doordarshan. Besides the department usually arranges exhibitions and distributes educative material with the help of voluntary consumer organisations. For this purpose an amount of Rs. 8.00 lacs is provided in VIII Five Year Plan—1992-97.

(D) *Verification and stamping of monometers of instruments for measuring Arterial Blood Pressure (Sphygmomanometer)—(Rs. 3.00 lacs)*

Extension of legal control to cover measurements involved in ensuring public health and human safety is to be done by verifying the monometers instruments for measuring Arterial Blood Pressure (Sphygmomanometer) under the provisions of Standards of Weights & Measures (Enf.) Act, 1985 according to specification laid down in the Standards of weights & Measures (General) Rules, 1987. The approximate cost of establishing the test Laboratory with testing equipments at Standard Laboratory will be Rs. 3.00 lacs. The expected revenue from that verification is Rs. 1.00 lac per year.

(E) *Creation of additional posts in zones—(Rs. 2.50 lacs)*

With the increase of workload in Zonal Offices due to expansion in the activities of the deptt., the department proposed to strengthen the existing zonal offices by addition of at least 2 posts of Inspectors Grade-I in each zone. However, only 6 posts of Inspectors of Grade-II have been sanctioned so far, which will continue in Eighth Plan (1992-97).

(F) *Strengthening of Standard Lab. at Wazirpur—(Rs. 5.20 lacs)*

In order to strengthen the Standard Laboratory at Wazirpur, Delhi, the following posts were created in the year 1990-91 for verification & stamping of clinical thermometers. These posts will continue in the Eighth Plan (1992-97).

Name of post	No.	Pay scale
		Rs.
1. Sr. Metrological Asstt.	2	1640-2900
2. Jr. Metrological Asstt.	6	1400-2600
3. Lab. Assistant	5	950-1500
4. Chowkidar	2	750-940
5. Sweeper	1	750-940
6. Driver	1	950-1500
	17	

(G) *Purchase of Vehicles—(Rs. 5.00 lacs)*

At present the department has 3 Matadors for field Inspections by the Zonal Offices and 2 Jeeps at headquarters. At least 3 more Jeeps will be required for inspections by the zones (i.e. 5 Matadors for 12 zones including 2 for the enforcement cell to be set up and one for consumer education and publicity cell. Therefore, 3 more Jeeps shall be required in the 8th Five Year Plan.

(H) *Purchase of land & construction of office building—(Rs. 15.00 lacs)*

(i) *Land for Taxi Meter Unit—(Rs. 5.00 lacs)*

Taxi Meter Unit of the department is functioning since, 1971, in a small barrack (temporary structure) at Khyber Pass, Delhi. With the increase in the number of taxis and auto-rickshaws, the department is facing problems in testing the fare meters. Apart from this electronic digital fare meters are likely to be introduced in

National Capital Territory of Delhi and additional space will be required for calibration/recalibration of electronic digital fare meters. Considering the functional requirement of space it is essential to have sufficient land measuring 1000 sq. meters. Deptt. will purchase suitable land for this unit during the eighth Plan.

(ii) *Allotment of land and construction of Zonal Office Building at Tilak Nagar, New Delhi—(Rs. 10.00 lacs)*

The DDA has allotted a piece of land measuring 1000 sq. metres to W & M Department for construction of an office at Tilak Nagar, New Delhi and possession of the land has already been handed over to the department/PWD. The construction of the office is to be started by PWD on approval of the building plan.

The deptt. has been allotted a plot measuring 800 sq. metres at Vishwas Nagar Institutional Area, Delhi. Construction of building on the said plot has been entrusted to DSIDC. Since the land allotted is low-lying and is filled with sewage water, DDA has been directed by the C.S. to provide an alternative site in Trans Yamuna area for construction of a building for Shahdara and Laxmi Nagar Zones. DDA will provide the alternative plot soon. Office buildings for zonal offices at Tilak Nagar and in Trans Yamuna area are proposed to be constructed during Eighth Five Year Plan for which an outlay of Rs. 10 lacs is provided.

Details of expenditure to be incurred in Annual Plan (1992-93)

(a) *Revenue Section :*

S. No.	Name of the Scheme	Amount (Rs. in lacs)
1.	Creation of additional posts in zones	2.50
2.	Strengthening of Standard Lab. at Wazirpur	2.50
3.	Creation of Special Cell at HQ for consumer education & publicity	2.00
		7.00
(b) <i>Capital Section :</i>		
	Construction of boundary wall and building for zonal office at Tilak Nagar, Delhi	3.00
	Total a & b	10.00

XV. GENERAL EDUCATION

Education holds the key to economic growth, social transformation, modernisation and national integration. Plan proposals of Delhi have been formulated keeping in view the broad objectives laid down in the National Policy on General Education. Earnest efforts are being made by Delhi Administration to provide educational facilities to every child who opt for it. While improving the educational facilities quantitatively adequate attention is also paid to improving the quality of Education.

The main emphasis in the 8th Five Year Plan is to make education a vehicle to enhance the capabilities of the young generation of Delhi. Greater emphasis is laid on mass-literacy, non-formal education and improvement of quality of education at Elementary and Secondary level. Importance is given to vocationalisation of school education. Efforts are being made to involve the community actively and effectively. Special stress has been laid on the education of the deprived groups such as women, rural people, socially and economically backward students of the society.

The National Policy on Education, 1986, aimed at promotion of National Progress, a sense of common citizenship and culture and strengthening National Integration. It laid stress on the need for a radical reconstruction of the education system to improve its quality at all stages and give much greater attention to Science and Technology. By 1997 all children will be provided free and compulsory education upto 14 years of age.

The educational facilities are developed in stages i.e., pre-primary, primary, middle, secondary/senior secondary and university level. Pre-primary Education is mainly the responsibility of local bodies. Middle, Secondary and Sr. Secondary education is primarily looked after by Delhi Administration. NDMC, though mainly concerned with Primary education, is running 10 Middle Schools, 6 Senior Secondary Schools and 4 Secondary Schools in its area at present. Apart from this, some autonomous bodies and private organisations are also engaged in imparting education at the elementary and secondary level. These organisations are given grants-in-aid by Delhi Administration to meet the expenditure on education. As a result of investment in the implementation of various educational programmes under various Five Year Plans the number of schools and enrolment has increased considerably and consequently the literacy rate in Delhi has increased from 38% in 1961 to 61.5% in 1981 compared to the All India literacy rate of 36.23% in 1981. As per 1991 census the literacy rate in Delhi is 76% compared to All India literacy rate of 52%.

The following table indicates the growth of the number of schools in the N.T. of Delhi since the beginning of the Plan era.

Stage	1950-51	1979-80	1984-85	1989-90	1990-91	1991-92
Primary	530	1677	1839	1942	2007	2039
Middle	74	325	397	442	485	497
Sec./Sr. Sec. Schools	69	678	843	1087	1130	1165
Total	673	2680	3079	3471	3622	3701

The enrolment of children in different age groups has also increased considerably as is evident from the following table :—

(Figures in lacs)

Age Group	1971-72	1975-76	1979-80	1984-85	1989-90	1990-91	1991-92
6—11	4.65	5.71	6.44	7.67	9.20	9.40	9.64
11—14	2.25	2.59	3.03	3.99	5.14	5.24	5.35
14—16	1.62	1.91	2.40	2.94	3.78	3.94	4.02

7TH FIVE YEAR PLAN—1985-90 AND ANNUAL PLANS—1990-91, 1991-92

The agency-wise financial position of the 7th Five Year Annual Plans 1990-91 and 1991-92 is indicated below :—

(Rs. in lacs)

S. No.	Agency	7th Plan 1985-90 App. outlay	Actual Expenditure		
			7th Plan 1985-90	1990-91	1991-92
1	2	3	4	5	6
1.	Dte. of Edu.	20,240.00	13,107.40	2730.85	2904.88
2.	M.C.D.	3,075.00	5,013.20	1741.00	2675.00
3.	N.D.M.C.	572.00	832.50	293.00	315.50
	Total	23,887.00	18,953.10	4764.85	5895.38

The following table indicates the year-wise number of schools opened/bifurcated/upgraded during the 7th Plan Period and Annual Plans 1990-91 and 1991-92 :—

S. No.	Agency/Items	7th Plan 1985-90	1990-91	1991-92
1	2	3	4	5
<i>I. Directorate of Education</i>				
1.	Opening of new Middle Schools	81	11	1
2.	<i>Bifurcation of :</i>			
	(a) Middle Schools	9	—	—
	(b) Sec. Schools	14	2	—
	(c) Sr. Sec. Schools	28	8	—

3. *Upgradation of :*

(a) Middle to Sec. Sch.	100	16	17
(b) Sec. to Sr. Sec. Sch.	112	12	28
Total	344	49	65

4. Conversion of Sec./Sr. Sec. Schools into Composite Sch. ols	—	28	28
5. No. of School Bldgs. constructed	41	NA	7
6. No. of degree college opened	4	2	1

MCD

Primary Schools	151	65	22
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NDMC

Primary Schools	—	1	—
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8th Plan 1992-97 and Annual Plan 1992-93

The programmes under General Education of Directorate of Education during the 8th Plan Period are mainly for the followings :—

1. Removal of illiteracy, Non-formal Education.
2. Removal of disparities amongst Rural, Women, SC/ST Backward Class and Minorities.
3. Emphasis on Vocationalisation of Education.
4. Expansion of Education.
5. Improvement in quality of Education.
6. Improvement of Management System of Education.
7. Population Education.

The enrolment proposed for 8th Plan is indicated below :—

Enrolment Position (In lacs) :

Class	1992-97	1992-93	1993-94	1994-95	1995-96	1996-97
1	2	3	4	5	6	7
1. VI to VIII	6.05	5.45	5.60	5.75	5.90	6.05
2. IX to X	2.78	2.60	2.64	2.68	2.73	2.78
3. XI to XII	1.56	1.47	1.49	1.51	1.53	1.56

The No. of Schools/Colleges/School Buildings proposed for 8th Plan 1992-97 are given below :—

Stage	1992-97	1992-93	1993-94	1994-95	1995-96	1996-97
1. No. of Middle Schools	110	28	19	20	21	22

2. Bifurcation of :

1. Middle Schools)					
2. Sec. Schools	)	45	9	9	9	9
3. Sr. Sec. Schs.)					

3. Up-gradation from :

1. Middle to Sec.	)	225	38	42	47	48	50
2. Sec. to Sr. Sec.)						

	Total	380	75	70	76	78	81
4. Conversion of Sec./Sr. Sec. Schools into Composite Schools		550	120	100	105	110	115
5. No. of Degree Colleges		10	2	2	2	2	2
6. No. of School Buildings		87	15	16	18	18	20

II. M. C. D.

1. No. of Primary Schools	200	40	40	40	40	40
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III. N. D. M. C.

1. Primary Schools	3	1	1	1	—	—
2. Middle Schools	4	2	1	1	—	—

Under the Adult literacy programme the number of beneficiaries may rise from 1.60 lacs to 2.80 lacs during 1992-93.

Under the Adult literacy programme the target is to cover 2.40 lacs additional beneficiaries during the 8th Plan. 200 new primary schools are proposed to be opened/bifurcated during the 8th Plan Period by M.C.D. 40 will be opened during 1992-93. Similarly NDMC proposes to open three new primary schools in its area during the 8th plan.

For the 8th Five Year Plan 1992-97, an outlay of Rs. 45000.00 lacs has been approved including Rs. 7,200.00 lacs for the Annual Plan 1992-93 for General Education Sector. The agency-wise approved outlay is given below :—

S. No.	Agency	8th Plan 1992-97 Approved Outlay	Annual Plan 1992-93 Approved Outlay
1.	Delhi Admn.	24500.00	3900.00
2.	M. C. D.	19100.00	2975.00
3.	N. D. M. C.	1400.00	325.00
	Total	45000.00	7200.00

The following three new schemes have been approved under Dte. of Education for the 8th Plan 1992-97 :—

1. G.I.A. to the society of National Museum Institute of the History of Art Conservation and Museology Delhi (Rs. 5 lacs).
2. Coaching/Remedial facilities to the students belonging to Educationally Backward classes from grass root level. (Rs. 5.00 lacs).
3. Assistance to students studying in Madrassas for teaching English, Maths and Science (Rs. 35 lacs).

The Agency/scheme-wise details are as follows :

I. DIRECTORATE OF EDUCATION

1. *Strengthening of Book Banks—(Rs. 70.00 lacs)*

Under this continuing scheme, books are provided to the needy students of class VI to XII whose parental income is less than Rs. 500/- P.M. It is proposed to increase this limit from Rs. 500/- P.M. to Rs 1500/- P.M. A similar proposal is under active consideration of the Government of India. Once this proposal is approved, it will be a mere formality to obtain the approval of the Govt. of India under the scheme. Rs. 70.00 lacs (Rs. 50.00 for MNP & Rs. 20.00 lacs for Non-MNP) for the 8th Plan 1992-97 has been approved including Rs. 24.00 lacs for 1992-93.

2. *Free Transport for Girls from Rural Areas—(Rs. 55.00 lacs)*

The objective of this on going scheme is to encourage girls from rural areas to pursue their studies by providing them with transport facilities. At present nearly 4100 girls studying in 12 schools of Urban areas from about 120 villages are availing this facility. The facility is provided through private contractors.

A sum of Rs. 55.00 lacs (Rs. 30.00 lacs for MNP and Rs. 25.00 lacs for Non-MNP) including Rs. 10.00 lacs for the year 1992-93, has been kept for the 8th Plan, 1992-97.

3. *Improvement of School Libraries—(Rs. 105.00 lacs)*

Special grant is sanctioned to all the Government and Government aided schools for purchase of books on new topics to strengthen school libraries under this continuing scheme. Rs. 105.00 lacs (Rs. 60.00 lacs for MNP & Rs. 45.00 lacs for Non-MNP) for the 8th Plan 1992-97 has been approved including Rs. 23.00 lacs for the Annual Plan 1992-93.

4. *Free Supply of Uniforms—Rs. (120.00 lacs)*

This continuing scheme envisages :—

1. To help children of weaker section including SC/ST.
2. To remove inferiority complex from their mind.
3. To make them regular in attendance.

A pair of Uniforms costing Rs. 70/- is given to the students of Government and Government aided schools whose parent's income is less than Rs. 500/- P.M. and who

Rs. 40.00 lakhs are approved for the 8th Five Year Plan 1992-97 including Rs. 5.00 lacs for the Annual Plan 1992-93.

7. *Additional Schooling Facilities in the Age Group 11-14 & 14-17 Years (Rs. 6100.00 lacs)*

The main objective of the scheme is to provide additional educational facilities to accommodate the school going children in the age group (11-14 & 14-17 Years). Every year, the additionality in enrolment in the age group 11-14 years and 14-17 years, is to extent of 10,000 to 20,000 students. The programme contents are as under :—

1. Opening of New Middle Schools.
2. Bifurcation of Middle, Secondary and Senior Sec. over crowded schools.
3. Upgradation of Middle Schools to Secondary and Secondary to Senior Secondary depending on enrolment.
4. Addition of New sections.
5. Introduction of New Subjects.
6. Creation of new posts for newly opened/bifurcated/upgraded schools as per post-fixation norms.
7. Hiring of tents for new schools.
8. Purchase of furniture.
9. Printing of admission forms for all the five Distts.
10. Providing, books, stationery A. V. aids and Misc. contingencies for the new schools.
11. Printing of Post-Fixation Proforma.
12. Providing Grant-in-aid to aided schools.

The table below indicates the details of new schools opened/Bifurcated/Upgraded during the 7th Plan :—

S. No.	Name of the Items	Target 85-90	Achievements					7th Plan Total
			85-86	86-87	87-88	88-89	89-90	
1	2	3	4	5	6	7	8	9
1.	Opening of New Middle Schools.	119	11	21	26	9	14	81
Bifurcation of :								
1.	Middle Schools	25	5	—	1	3	—	9
2.	Sec. Schools	74	1	3	3	2	5	14
3.	Sr. Sec. Schools	33	2	7	7	4	8	28

Upgraded from :

1. Middle to Sec.	83	26	21	20	8	25	100
2. Sec. to Sr. Sec.	105	18	20	23	17	34	112
	439	63	72	80	43	86	344

The enrolment position is as under (Thousands) :

1. Class VI to VIII	524	418	442	470	498	514
2. Class IX to X	237	199	211	224	233	240
3. Class XI to XII	137	115	119	126	136	138

The target of enrolment for 1992-93 is fixed as under (in thousands) :

Class VI to VIII	545
Class IX to X	260
Class XI to XII	147

The following table gives the details of the number of schools proposed to be opened/bifurcated/upgraded during 1992-93.

S. No.	Item	No. of schools
1	2	3
1.	New Middle Schools	28
2.	Bifurcation of :	
	(i) Middle Schools	9
	(ii) Sec. Schools	
	(iii) Sr. Sec. Schools	
3.	Upgraded from :	
	(i) Middle to Sec.	38
	(ii) Sec. to Sr. Sec.	
		75

The targetted enrolment position for the 8th plan is as under :—

(in thousands)

	92-97	92-93	93-24	94-95	95-96	96-97
1. Class VI to VIII	6.05	5.45	5.60	5.75	5.90	6.05
2. Class IX to X	2.78	2.60	2.64	2.68	2.73	2.78
3. Class XI to XII	1.56	1.47	1.49	1.51	1.53	1.56

The following posts are proposed to be created during the 8th Five Year Plan 1992-97 out of which 676 posts are required for 1992-93.

S. No.	Category	No. of Posts					
		92-97	92-93	93-94	94-95	95-96	96-97
1	2	3	4	5	6	7	8
1.	Principal	155	8	34	37	37	39
2.	V. Principal	145	19	24	29	34	39
3.	P. G. Ts.	1240	88	276	284	292	300
4.	T. G. Ts.	1080	155	202	226	238	259
5.	Language Tr.	375	59	69	77	82	88
6.	H. Master (Middle)	30	3	5	6	7	9
7.	Drawing Tr.	100	9	19	22	25	25
8.	P. E. Ts.	100	9	19	22	25	25
9.	Dom. Sc. Tr.	60	9	10	12	13	16
10.	Librarian	145	19	24	29	34	39
11.	Music Ts.	60	13	10	11	12	14
12.	Lab. Asstt.	225	35	40	45	50	55
13.	Head-Clerk	145	19	24	29	34	39
14.	U.D.C.	145	19	24	29	34	39
15.	Supdts.	145	19	24	29	34	39
16.	Care Taker	330	50	58	66	74	82
17.	L.D.C.	100	13	17	21	23	26
18.	Class-IV	380	52	64	76	88	100
19.	Cl. IV (P/Time)	380	52	64	76	88	100
20.	Lib. Attendants	100	13	17	21	23	26
21.	Lab. Attendants	100	13	17	21	23	26
22.	Dom. Sc./Phy./Bio.	—	—	—	—	—	—
Total		5540	676	1041	1168	1270	1385

Preference will be given to opening new schools in rural areas, re-settlement colonies, new colonies and the areas dominated by the Scheduled Castes and Weaker section of the society including minority communities. One post of Mali & one post of extra Chowkidar & Sweeper will be provided for the safety and the improvement of the environment in the schools.

A sum of Rs. 6100.00 lacs (Rs. 2400.00 lacs for MNP & Rs. 3700.00 lacs for Non-MNP) for the 8th Five Year Plan 1992-97 including Rs. 1150.00 lacs for the Annual Plan 1992-93 has been kept for the scheme.

8. *Introduction of Yoga in Delhi Schools (Rs. 30.00 lacs)*

This on going scheme envisages exposing the students to yoga. Yoga is a system for harmonious development of the body and mind of the individual and helps in developing neuro-muscular co-ordination, strengthening the psychosomatic system, acquiring self discipline, cultivating a rational and psychological approach, moral values in life, developing pride towards our cultural heritage and feeling of universal brotherhood and fraternity (Yoga does not recognise barriers of caste creed, colour or nationality).

Details of Physical Targets are given below :—

ANNUAL PLAN 1992-93 (Rs. in lacs)

S. No.	Particulars	Physical Target		8th Plan Physical Target	
		Sch.	Studs.	Sch.	Students
1.	Purchasing of Yoga teaching articles for schools	125	10,000	600	50,000
2.	Inter Zonal Yoga competition	—	2,000	—	10,000
3.	Trs. Refresher Trg. camp—two camps	110	110	500	500
4.	Provision for Office Equipments, Purchase of Vehicle, Yoga materials and Setting up of training centres in 5 Distts. is included under the schemes.				

All Yoga teachers work in their schools according to the school time table. To get full benefits of yoga teaching, it is proposed to set up one central yoga-cum-physical fitness training centre in the central part of the city. It is also proposed to establish one centre each in all the 5 districts, depending upon the results of the central training centre. The following staff would be needed to run the proposed centre.

S. No.	Name of post	No. of post	Pay scale Rs.
1.	Yoga Teacher or Research Officer	1	1640-2900
2.	Yoga Teacher/Fitness Tr. (Male/ Female)	2	1400-2600
3.	Class-IV	2	750-940

The annual expenditure for the above posts is about Rs. 1 lac. To run the centre material like Lari/Tat-patti, blanket, lota etc. is needed Rs. 1 lac are required for the purpose.

A sum of Rs. 30.00 lacs (Rs. 20.00 lacs for MNP & Rs. 10.00 lacs for Non-MNP) has been approved for the 8th Five Year Plan 1992-97 including Rs. 4.00 lacs for the Annual Plan 1992-93.

9. Capital Works—Construction of School Buildings (Rs. 12800.00 lacs)

Under the scheme, the following programmes are undertaken :—

1. Major Construction Works

A large number of school buildings are required during the 8th Plan period. The average cost of a school building is about Rs. 175.00 lacs. Provision for the backlog components and carry over works and new works is to be made during the 8th Plan period. It is also proposed to construct 5 district office buildings and one H.Q. building during the 8th Plan period.

During 1992-93—15 buildings, 1993-94—16 buildings, 1994-95—18 buildings, 1995-96—18 buildings, 1996-97—20 buildings are proposed to be constructed.

Work has been started on the following school buildings during 1991-92 :—

1. Yamuna Vihar, B-Block
2. Mansarover Park
3. Braham Puri
4. Gautampuri, Usmanpur
5. Jamia Noor Nagar
6. Məngol Puri
7. Najaf Garh.

2. Renovation

For the renovation/major repair of existing pucca buildings and semi-permanent structures an amount of Rs. 250 lacs is needed during 1992-93. Out of this Rs. 75 lacs shall be spent on carry over works and Rs. 75 lacs on the work which could not be taken up during the last year and Rs. 100 lacs for carrying out new sanctions.

3. Horticulture

In view of the heavy pollution in the city it is proposed to plant more trees and take up Horticulture work to provide a green belt in the school premises. For this purpose Rs. 60 lacs are required for the year 1992-93.

4. Purchase of Land for School Sites

Land is allotted by DDA, Land & Building Deptt. Gram Panchayat every year for opening new schools. An amount of Rs. 300 lacs is required during 1992-93 for purchase of land from various agencies.

The rates of land of DDA are as follow :

Distt. North	Rs. 19 lacs per acre
Distt. South	Rs. 28 lacs per acre
Distt. East	Rs. 14 lacs per acre
Distt. West	Rs. 23 lacs per acre

During 1992-93 20 school sites are proposed to be purchased out of 125 sites proposed to be purchased during the 8th Plan period.

Rs. 12800.00 lacs. (Rs. 4500.00 lacs for MNP & Rs. 8300.00 lacs for Non-MNP) has been approved for the 8th Five Year Plan 1992-97 including Rs. 1700.00 lacs for the Annual Plan 1992-93.

10. *Adult Literacy Programme (Rs. 200.00 lacs)*

Eradication of illiteracy is an indispensable component of Human Resources Development. Literacy is an essential tool of communication and learning for acquiring and sharing information, which is a precondition for individual growth and National development. Literacy helps in improving the quality of life, the environment and leads to agricultural and industrial development. It has been seen that literacy has helped in improving the health of individuals, has reduced the infant mortality rate and has contributed to checking population growth.

Delhi was at the top of the literacy charts during the 1961 census. In spite of the continuous influx of nearly one lac illiterate adults every year. Delhi has been able to maintain its status of being third in the country for the last two decades. The following table shows the growth of literacy in Delhi since 1951 :—

Year	Total Population (in lacs)	Rate of Literacy	Increase in Literacy
1951	17.4	38.3%	—
1961	26.59	52.75%	increase of 14.45%
1971	40.66	56.5%	increase of 4%
1981	62.23	61.3%	increase of 5%
1991	93.00	76.09%	increase of 15%

To achieve universal literacy, a literacy profile was prepared with the help of the institute of Economic growth, Delhi University. It is estimated that at present there are about 7.5 lacs illiterates in Delhi in the age group of 15-35. However, due to continuous influx of illiterate in search of a Livelihood the number of illiterates is going to be much more.

To achieve total literacy it is proposed to strengthen the formal school system of Education and ensure that all the school going children are enrolled in schools and are retained to acquire the minimum standard of Education. For the illiterates in the age group of 15-35, it is proposed to make at least 1.50 lac literate every year. For this purpose there are 20 Adult Education Projects of 100 centres each under SAEP & the enrolment is approximately 60,000 illiterates. In the rural areas there are 300 centres under R.F.L.P. & 9,000 adult illiterates are drawing benefits.

Efforts are on to encourage voluntary agencies to take up this work of national importance. Under the programme 'each one teach one' students drawn from Govt. & Govt. Aided Schools are being encouraged to make 1 lac illiterates literate. Delhi University has also promised to make atleast 30,000 illiterates literate every year. In this way it is

propose to cover the following number of illiterates under literacy Programmes in each year.

1. Under S.A.E.P.	0.60 lac
2. R.F.L.P.	0.09 lac
3. Students of School	1.00 lac
4. Delhi Uni. Stds.	0.30 lac
	1.99 lac

Out of these enrolled illiterates atleast 1.5 lac will be made literate. Similar efforts will be continue every year and during all the five years of the 8th Plan it is proposed to make 7.5 lacs adults literate.

Linkages with Vocational Edn. for illiterates will be made by setting up vocational centres, alongwith Adult Centres. One Pilot Project will be taken up in each Adult Centre near the Industrial Estates where short term training will be provided with the help of Industries and other training institutes in the following trades :—

- | | |
|--|-----------------------------|
| 1. Garment Fabrication | 9. Electrician |
| 2. Surface changes and sanitary | 10. Refrigeration |
| 3. Welding | 11. Galvanising (Puncture) |
| 4. Blacksmith | 12. Dent beating & painting |
| 5. Carpentry | 13. Scooter Mechanics |
| 6. Upholstry | 14. Motor Mechanics |
| 7. Plumbing | 15. Typing |
| 8. Electronics (Repair of house hold appliances) | 16. Banking |

To implement the programme the following posts are proposed.

Name of the Post	No. of Posts
1. Jt. Director of Edn.	1
2. Dy. Director of Edn.	1
3. Project Officer	7
4. Asstt. Project Officer (Pract.)	7
5. Research Officer	2
6. Stat. Asstt.	7
7. Head Clerk	2
8. Steno	2
9. U.D.C.	4
10. L.D.C.	9
11. Class-IV	10

In view of the continuous immigration of people to Delhi it is difficult to provide proper formal schooling facilities immediately. Hence the need for adult education is perennial.

While mere literacy is necessary, for neo-literates school dropouts or those who could not attend school due to poverty, broken homes, employment need qualitatively different adult education. It is for this reason that new changes in the methods of teaching and the infrastructure of adult education are immediately needed. A qualitative thrust is needed to be given to adult education. Some new orientation, needs to be given to the entire structure of adult education in Delhi in the 8th Plan.

It is proposed to have a separate building for the Adult Education Deptt. with facilities for officers. An auditorium, conference room, seminar room, a work shop for Vocational work, a laboratory and a library. (Common room having a canteen is also needed). This may require a provision of Rs. 2.00 crores initially.

Televisions, Video Cassette Recorder, are also needed.

Educational tours for the field functionaries and instructors and neo-literates are needed.

Provision of Meals to Neo-Literates

It is proposed to provide tea and snacks to the learners of the weaker section at various centres.

It is proposed to have 5 mobile vans carrying libraries and film screening facilities. The vans can be used for inspection work also. A jeep fitted with a wireless set to monitor the work of Adult Education is also proposed. Provision for free supply of books is also proposed.

It is proposed to create one post of Supdt. to coordinate administrative work and Asstt. Director for Audio Visual Education and Social Education the scales of 3000-4500 and an Administrative Officer (Accounts). There is only one post of St. Asstt. in the pay scale of Rs. 1400-2300. In the absence of supporting and adequate staff, the achievements under the scheme are not being monitored and at times a lot of difficulties are faced in supplying the information asked by various agencies like Govt. of India, Delhi Admn., etc. It is proposed to create an additional post of R.O. and Stat. Asstt. and two Stat. Investigators under the scheme.

Provision for the following items of expenditure is included in the scheme.

1. 700 part-time Instructors @ Rs. 100 P.M.
2. 140 Preraks @ Rs. 4000 P.A.
3. Learning Material @ Rs. 16 for 60,000 Students.
4. Learning Material for 'each one teach one' @ Rs. 16 for 1,00,000.
5. Material @ Rs. 99/- for 2000 centres.
6. Post literacy books @ Rs. 7/- for 60,000 Students.
7. Newspapers for 4 month @ Rs. 100/- per centre.

It is proposed to enrol 1.99 lacs illiterates in each year of the 8th Five Year Plan. The anticipated achievement may be 1.50 lacs per annum.

A sum of Rs. 200.00 lacs has been approved for the 8th Five Year Plan 1992-97 including Rs. 15.00 lacs for the Annual Plan 1992-93.

II. Saturation Literacy Programme (Education for all) (Rs. 200 lacs)

Education is one of the essential components of human resource development. Eradication of illiteracy is essential for the smooth working of democracy and national development. The illiterate masses are not aware of their rights and responsibilities and thus, cannot assume the role of responsible citizens.

Need of Saturation Literacy

As per 1991 census, the total population of Delhi is 93,70,475 out of which 59,49,528 are literate and 34,20,947 are illiterate. The illiterate population includes population in the age group 0-6 years which is about 16% of the total population and comes to about 18.78 lacs. By the end of the decade, this figure is likely to touch 28.00 lacs in case concerted efforts are not made to eradicate illiteracy. Although a number of agencies have taken up programmes of adult and non-formal education yet their results have not been encouraging and the illiterate population is on the increase. It is proposed to cover all the illiterates numbering about 18.78 lacs under Saturation Literacy Project/ Education for all. This will increase their ability to appreciate simple messages for health, sanitation, nutrition, civic sense, discipline and family welfare.

Implementation

Since the illiterate population is scattered throughout Delhi, a survey will be conducted with the help of school-staff or alternatively this work will be assigned to some private agency so as to have accurate and authentic information. Thereafter, the data so collected will be computerised. The children in the age-group 6-14 years will be enrolled in the Primary schools and drop-outs will also be sent to the schools. Children who have left schooling in between, will be enrolled under non-formal education. Special emphasis will be laid on girls' education keeping in view the limited financial and other resources available it is difficult to carry out mass programme of literacy with the existing infrastructure. Accordingly, E.F.A. (Education for all) activity will be notified as the only activity under SUPW so that all the students studying in Sec. and Sr. Sec. classes may take up this activity. Accordingly, on the lines of the survey of illiterates, the student volunteers will also be identified and their particulars will be collected on a prescribed form. Since this will form a part of SUPW the student volunteers will be required to take classes twice a week of 1½ hours duration each. Thus they will be able to teach for about 150 hours in an academic year.

The learner-kits and other support material supplied by the State Resource Centre under National Literacy Mission will broadly define the curriculum and the learning material will be supplied free of cost to the schools by the State Resource Centre. The stationery and other subsidiary items will be supplied by the Directorate of Education. Since this activity will form a part of SUPW, the student volunteers taking part in this project will be provided transport by the schools apart from light refreshment on the teaching days.

ACTIVITY—I**Identification of area-I, Phase**

Area will be identified by the following agencies :—

- (i) DDEs of Dte. of Education (inclusive of NSS and part time teachers of academies)
- (ii) M.C.D.
- (iii) Unaided Schools
- (iv) Industrialists

Following activities will be taken up :—

- Total population in 33 segments.
 - Total illiterates in 6-35 years of age.
 - District-wise segment distribution.
 - Each district to take 1/5th of the illiterates in I year.
- (a) It will be preferred that activities are generated for specific segments so as to facilitate concentrated work.
 - (b) Alternative could also be smaller catchments amounting to approximately 1/5th illiterate coverage all over the district.
 - (c) Yet another alternative could be adopting existing 'Each One-Teach One'. Logistics for evaluation of learner will be different in this strategy.

All approaches are acceptable. Costing will be different for each approach.

ACTIVITY—II**Identification and motivation of those who will be involved in Activity—I**

- (i) Ideally all officers and teachers should be contacted and mini-seminars/discussions, forums should be conducted and the need to provide 'Education For All' should be communicated. This will also throw up a suitable strategy and approach for the area to be adopted under Activity-I. DDEs should organise and complete this activity. Other agencies are similarly expected to handle this without outside support.
- (ii) Identification of Nodal officer for each district. This nodal officer and DDE will be responsible for all efforts or Govt./Aided/Unaided schools and industrialists/NGOs in the districts.

ACTIVITY—III**Micro-survey of illiterates in identified areas plus identification of all resources in the area**

Proforma has to be uniform to facilitate computerisation and preparation of data base for identified illiterates and identified volunteers who shall teach the illiterates. This will also form the basis for in-house and independent evaluation.

All Non-Govt. Organisations, Adult Education Centres, Non-Formal Centres and other agencies contributing towards EFA situated in the area need to be identified so that duplication of efforts by multiple agencies can be avoided.

Existing 'Each One-Teach One' project is dependent upon student motivating a learner. At present no records are being maintained about the illiterates made literate. Accordingly this programme will be centrally monitored for further additional impetus. Further, data base is necessary regarding persons to be made literate, their names, name of the heads of family, number of literate and illiterate members in the family etc. This data will be computerised and regular monitoring thereof will be done.

To give publicity to this project, awareness drives will be arranged throughout Delhi with the help of N.C.C., N.S.S., Scouts and Girl-Guides. Corner-plays will also be arranged with the help of SKP and different academies. Short documentaries will also be arranged on Doordarshan.

Plan of Coverage

The work will be done in phases over a period of five year during the 8th Plan in the following manner :—

(Figures in lacs)					
1992-97	1992-93	1993-94	1994-95	1995-96	1996-97
18.78	3.50	3.50	3.78	4.00	4.00

At present there are about 1165 Sec. and Sr. Sec. Schools in Delhi. In case 8 sections are taken in a Sec./Sr. Sec. Schools and number of students in a section is 40, a school will be able to teach about 320 illiterates in a year and thus the total number of illiterates made literate by all the schools will be about 3.70 lacs in a year. However, the target has been fixed on the lower side keeping in view the lower number of enrolment in a school at any stage.

ACTIVITY—IV

Fixing a Suitable Time and Distributing Tasks

The possibility of using boys for survey, evaluation and supplementary teaching at odd hours will be explored.

Timings for teaching by students to be determined.

Possibility of use of vacations to be explored through NSS/through schools.

Possibility of declaring SUPW as the only activity for next 5 years from IX class to XII class to be explored.

A committee may be set up for this activity.

ACTIVITY—V

Teaching-Learning Material

1. (a) Material should be uniform to facilitate evaluation of learners progress.
- (b) Committee to be set up to identify the material.

- (c) Material should be interesting so as to retain interest of the learners.
- 2. (a) Material for teaching to be devised by SCERT alongwith Delhi Saksharata Samiti and experience gained by it.
- (b) Material for teaching senior officers in the implementation strategies of EFA.
- (c) Material for exposure to Principals.

ACTIVITY—VI

Identification of Resource Persons and Training of Volunteers

1. Schedule for training of volunteers in three tiers.
2. SCERT to identify the resource persons who will transfer the teaching techniques to specific teachers who will handle the student group. DDEs to identify teachers for 2nd group after consulting Principals. Meeting with Principals should be organised by DDEs and EOs before people for 2nd teaching training are deputed.
3. Half day programmes for orientation of Principals/teachers to be organised by SCERT.

ACTIVITY—VII

Motivation of learner/communication Strategy

1. Experience gained in D. S. S. (Delhi Saksharata Samiti) Ambedkar Nagar proves the feasibility of mass kala-jathas, street play etc. just preceding or overlapping training as ideal for identification of additional volunteers and high learner receptivity. Strategy should be to carry this out after area identification. NSS volunteers and existing potential of DSS should be used fully.
2. Language academies and SKP to be requested to provide some special plays in the JJs.
3. TV and communication strategy.

ACTIVITY—VIII

Identification of Industrialists for work-place based Education for All.

ACTIVITY—IX

Preparation of Data Base.

ACTIVITY—X

Monitoring and Evaluation.

According to the 1991 census the total population of Delhi is 93.70 lacs of which the literates are 59.49 lacs. It is estimated that the total population in the age group of 6 plus is 78.18 lacs. The illiterates in the age group of 6 plus is 18.69 lacs (78.18—59.49) and the illiterates in the age group of 15.35 years is estimated at 6.23 lacs and the balance is illiterate in the age group of 6-14 years i.e. 12.46 lacs.

It is proposed to cover this population under Saturation Literacy Programme as under :—

SAEP	: 0.60 lac per year
RFLP	: 0.09 lac per year
Delhi Uni.:	0.30 lac per year
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	0.99 × 5 = 4.95 lacs

- (i) Students Each one-Teach One=5.00 lacs for 5 years.
(ii) Saturation Literacy
(iii) SALD 19.95 lacs
CBSE

Provision for the additional illiterate migrants from other States.

Universalisation of Elementary Education

Total Population (1991 Census)		93,70,475		
Age Group	Pop. %	Child Pop. (lacs)	Pop. Covered (lacs)	Pop. uncovered (lacs)
6—11	14	13.11	9.64	3.47
11—14	13	12.18	5.35	6.83
				<hr/>
				10.30 lacs

Child Population in the age group of 6 to 14 Proposed to be covered during 8th Plan (92-97)

Primary		lacs	
I—V	M.C.D.	2.00	2039 schools
	Dte. of Education	2.49	72+550 Composite schools @ 80 students per year per school
	NDMC/Central Schools	2.57	542+100 @ 80 students per year per school
	Unaided Schools		642
Upper Primary	Dte. of Education	0.65	
VI—VIII	NDMC/Aided	1.54	542+100 @ 80 students per year per school
			642

Coverage under Non-Formal Edn. 1.05

10.30 lacs

Cost per students	:	Rs. 1500/- (Approx.)
Cost for 10.30 lacs	:	Rs. 15,450 lacs

For implementation of the scheme an outlay of Rs. 200 lacs is approved in the 8th Five Year Plan 1992-97 including Rs. 50 lacs in the Annual Plan 1992-93.

12. Strengthening of Directorate of Education—(Rs. 60.00 lacs)

The main objective of this on-going scheme is to strengthen the staff at the Head Quarters in view of the expansion of educational facilities in Delhi. The total number of schools have increased from 1003 in the 6th Plan to 1529 in the 7th Plan and the number of teachers have gone up to 39,000 approximately from 16,336 during the 5th Plan period. But due to one reason or other the number of staff at Head Quarters has remained stagnant. To cope with the increased work load staff has been withdrawn from the districts or schools as a temporary measure. This internal arrangement has adversely affected the working in schools and districts. At present 67 officials drawn from districts and schools are working in some of the main branches namely GOC, Post-Fixation Cell, all the five establishment branches and accounts branch on internal arrangement basis.

It is therefore, proposed to create the following new posts in various categories to strengthen the staff at the Head Quarters for efficient control as per details given below :—

*1. Purchase Branch :—*At present, the purchase branch has no store-keeper. With the increase in the number of schools the stores requirements have also multiplied to a great extent. So the following posts are proposed to be created in the Purchase Branch (Accounts-III) :—

		Rs.
1. Dy. Controller of Accounts	1	3000-4500
2. Superintendent (Purchase Officer)	1	1640-2900
3. Head Clerk	1	1400-2300
4. Statistical Asstt.	1	1400-2300
5. U.D.C.	2	1200-2040
6. Steno for Accounts Officers	1	1200-2040
7. Daftary	1	775-1025
8. Peon	2	750-940
	10	

*2. Act Branch :—*The act branch has now been entrusted with the additional responsibility of handling litigation cases, which have increased enormously during the last few years. There are nearly 400 cases going on in different courts. Timely and effective supervision of this work requires the creation of a 'Litigation Cell' within

the Branch. Two posts of Legal Assistant and Assistant Legal Adviser were created. It is proposed to create the following posts to streamline the work :—

	Rs.	
1. Legal Adviser	3000-4500	1
2. Asstt. Legal Adviser	2000-3500	1
3. Superintendent	1640-2900	1
4. Legal Assistant	1400-2300	3
5. Head Clerk	1400-2300	1
6. U.D.C.	1200-2040	2
7. Stenographer	1200-2040	2
8. L.D.C.	950-1500	2
9. Class IV	750-940	2
		<hr/>
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3. *Vigilance Branch* :—This branch is proposed to be strengthened by creating the following posts :—

	Rs.	
1. Dy. Director Education (Vig.)	3000-4500	1
2. Admn. Officer (Vigilance)	2000-3500	1
3. Superintendent	1640-2900	1
4. Head Clerk	1400-2300	1
5. U.D.C.	1200-2040	1
6. Class IV	750-940	2
7. L.D.C.	950-1500	2
8. Stenographer	1200-2040	1
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4. *Administrative Reforms Branch* :—It is proposed to create the following posts to strengthen the Admn. Reforms Branch :—

	Rs.	
1. Administrative Officer	2000-3500	1
2. Superintendent	1640-2900	1
3. Statistical Asstt.	1400-2300	1
4. U.D.C.	1200-2040	1
5. L.D.C.	950-1500	2
6. Head Clerk	1400-2300	1
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5. *Language Cell* :—At present there is no staff in this cell. One PGT (Skt), UDC, LDC & Class IV have been drawn from schools to look after the work in the cell. The following staff are proposed to be created for the language cell :—

		Rs.
1. Asstt. Director of Edn.	1	3000-4500
2. Sr. Language Officer	1	2000-3500
3. Language Officers (Hindi, Urdu, Punjabi & Sanskrit)	4	1640-2900
4. Head Clerk	1	1400-2300
5. U.D.C.	2	1200-2040
6. Stenographer	1	1200-2040
7. L.D.C.	1	950-1500

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6. *Record Room* :—To cope with the increased work load of the Record Room, it is proposed to create one post each of Superintendent, Head Clerk, UDC & LDC and 3 Daftaries in the Record Room.

7. *College Cell* :—At present, the college cell has got only one Assistant. To cope with the increased work load, one post each of UDC, LDC and Peon is proposed to be created.

8. *Welfare Branch* :—It is proposed to create one post each of UDC, Steno for ADE (Welfare) and Peon to strengthen this branch as the work load has increased manifold with the increase in welfare activities.

9. *Establishment Branch* :—With the re-organisation of the Establishment Branch, the volume of work has become too much for the existing staff to handle. Hence, it is proposed to create posts for Two A.Os., 3 Supdts., 5 Head Clerks 5 Stat. Asstts. and 5 Stat. Investigators, 7 UDCs, 5 LDCs, 1 Steno, 2 Peons, 5 Chair Recanners and 2 Drivers, 2 Motorcycle Messengers alongwith vehicle to strengthen this branch for smooth functioning.

10. *House Building Advance Cell* :—At present there is no sanctioned strength for this cell. Internal adjustments have been made to cope with the increased work load. The following posts are proposed to be created :—

		Rs.
1. Superintendent	1	1640-2900
2. SAS Accountant	1	1640-2900
3. Head Clerk	1	1400-2300
4. UDC	1	1200-2040
5. LDC	1	950-1500

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11. Gazetted Officers Cell :—This cell is proposed to be strengthened by creating the following posts as there is no sanctioned post for the cell. There are about 20000 Gazetted Officers (C-I & II) and this cell deals with Administrative and Financial matters :—

		Rs.
1. Dy. Director Edn. (Admn.)	1	3000-4500
2. Administrative Officer	1	2000-3500
3. Superintendent	1	1640-2900
4. Head Clerk	4	1400-2300
5. UDC	6	1200-2040
6. Steno	1	1200-2040
7. LDC	6	950-1500
8. Peon	3	750-940
9. Stat. Asstt.	4	1400-2300

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12. Accounts Department :—This department is also proposed to be strengthened by creating one post each of UDC, LDC and Steno in the Accounts-II Branch and 1 post of UDC and LDC in Triple Benefit Scheme Branch. It is also proposed to create one more post of Dy. Controller of Accounts. There are 8 Accounts Officers and Budgetary Control is over Rs. 100 crores. It is also proposed to upgrade the post of Cashier from the UDC to Head Clerk.

13. Plan Evaluation Branch :—This branch is responsible for conducting evaluation of the plan schemes through out the year. This work is being looked after by the Plan Evaluation Officer with the assistance of Stat. Assistant and a Lower Division Clerk. Experience shows that existing staff is not sufficient to cope up with the burden of work entrusted to the P.E.O, Apart from evaluation work, plan evaluation branch looks after the work relating the SCP and 20 point programme. The following additional posts are required for this Cell :—

		Rs.
1. ADE (Plg.)	1	2200-4000
2. Stat. Officer	1	2000-3500
3. R.O.	2	1640-2900
4. Stat. Asstt.	2	1400-2300
5. Plan (Evaluation) Asstt.	4	1200-2040
6. Peons	3	750-940

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14. Planning Branch :—The planning branch is concerned with preparation of plan budget, issue of sanctions, etc. in respect of schemes of Education Sector. About

850 Govt. Schools and several PIOs are engaged in the implementation of the plan schemes. It is proposed to create two more posts of Statistical Assistants in the pay scale of Rs. 1400-2300. At present there is only one post of Planning Assistant but the work is so voluminous that the existing staff finds it difficult to cope with it. Budgetary exercise is the crucial and the important factor in the implementation of all the policies and programmes and is very much interlinked with the planning process. This requires dedicated and sincere efforts to co-ordinate the work of the plan and budget. So it is proposed to create one post of Dy. Director for the Planning Branch in the pay scales of Rs. 3500-5000. At present there is a post of ADE (Plg.) who is overall incharge of planning, plan evaluation survey and Statistical Branch. He is under the direct control of JDE (Plg.). There is gap between the two officers and as such it is felt that one higher officer in the rank of Deputy Director should be there to help in day to day work and co-ordinate between the staff and Higher Officers.

Apart from the post of ADE (Stat.) it is also proposed to create one additional post of DDE for the Planning Branch.

It is also proposed to create two posts of Stat. Assistant in the pay scale of Rs. 1400-2300 for effective implementation of the 20 Point Programme and special competent plan. These posts are required urgently because the present staff is not able to cope with the additional work-load.

15. *Post Fixation Cell* :—This Branch deals with collection of data from as many as about 3300 Govt. Aided/Un-Aided/Primary to Senior Sec. Schools located in Delhi. This data basically relate to two categories viz., numerical and financial position of these schools. Since this work is of purely technical nature most of the time, the staff posted there have been deputed to collect the data personally for its timely submission to the concerned authorities. The present staff sanctioned in the branch is inadequate and it is proposed to strengthen this branch by creating the following categories :—

		Rs.
1. A.D.E.	1	3000-4500
2. Statistical Officer	1	2000-3500
3. R.O.	1	1640-2900
4. Stat. Asstt.	7	1400-2300
5. Stat. Investigator	6	1200-2040
6. U.D.C.	2	1200-2040
7. Steno	1	1200-2040
8. L.D.C.	2	950-1500
9. Peon	2	750-940
10. Plan Asstt.	1	1200-2040

17. *Survey Unit* :—This branch has a sanctioned strength of only three posts i.e. one SA, one SI and one Peon to assist the Survey Officer in his day to day duties. Since this skelton staff is not sufficient to take up any type of survey independently,

the basic purpose of establishment of this unit has not been fulfilled. Accordingly it is proposed to strengthen this unit by creating the following posts :—

		Rs.
1. Statistical Officer	1	2000-3500
2. R.O.	1	1640-2900
3. Stat. Asstt.	3	1400-2300
4. Stat. Investigator	5	1200-2040
5. U.D.C.	1	1200-2040
6. Steno	1	1200-2040
7. L.D.C.	1	950-1500
8. Peon	1	750-940

The existing post of Survey Officer (3000-4500) is proposed to be converted into Asstt. Director of Edn. (Plg.) in the same scale.

18. *Capital Works* :—The present staff of this branch is insufficient to cope with the increased work load and as such one post each of Joint Director (Admn.), Asstt. Engineer, Legal Assistant, Head Clerk, Stat. Asstt. UDC, LDC, Steno and Driver is proposed to be created to strengthen this branch as the work load has increased manifold. Vehicle/one jeep is also proposed to be purchased.

19. *Scholarship Branch* :—This branch is also proposed to be strengthened by creating the following posts to cope with the increased work load :—

		Rs.
1. Accounts Officer	1	2200-3500
2. J.A.O.	1	1640-2900
3. U.D.C.	3	1200-2040
4. L.D.C.	1	950-1500
5. Peon	2	750-940

20. *Transport Facilities* :—5 vehicles are required for adequate mobility for various official and field work including contacting various agencies, like DDA, L&DO MCD, M/O Urban Development etc. by the officers of Head Quarters.

21. *Public Relation* :—There should be a co-ordinating body which defends the policies and programmes of the department through mass-media i.e. newspapers, radio and television etc. At present the department has no such branch which redresses public grievances and suggests various measures for the improvement or change of policies and programmes on the basis of public opinion. It has, therefore been decided to create the following posts in the Directorate of Education :—

		Rs.
1. Public Relation Officer	2	2000-3500
2. Stenographer	2	1200-2040
3. U.D.C.	4	1200-2040
4. Head Clerk/Assistant	2	1400-2300
5. L.D.C.	4	950-1500
6. Peon	2	750-940

The Public Relations Officer shall be responsible for collecting all the relevant information and will make suggestions or defend the department and maintain its reputation and public image, MCD and NDMC have this facility which has helped them in maintaining their public image.

22. *Co-ordination Branch* :—The following posts are to be created :—

		Rs.
1. A.D.E. (Co-ord.)	1	3000-4500
2. Superintendent	1	1640-2900
3. Head Clerk	1	1400-2300
4. Statistical Asstt.	1	1400-2300
5. U.D.C.	2	1200-2040
6. L.D.C.	2	950-1500
7. Peon	1	750-940

Presently, 74 Officers from the level of Director of Education to Education Officers are posted in the Directorate of Education at present. However, only 71 posts of Grade-II and Grade-III Stenographers have been created to provide stenographic assistance to these officers. Out of these 74 officers, 7 officers are entitled to stenographic assistance of the level of Gr.-II, whereas the deptt. has only one post of Grade-II Stenographer at the moment. It is proposed to upgrade 6 posts of Grade-III Stenographers to Grade-II and also create 3 more posts of Grade-III Stenographers under the Plan Scheme 'Strengthening of Directorate of Education'.

Four Gypsy Jeeps are proposed to be purchased for Head Quarters for attending meeting in Govt. of India Offices, inspection of schools etc. and inspection of Board Examination Centres.

For the Annual Plan 1992-93 an outlay of Rs. 10.00 lacs is approved. For the 8th plan outlay of Rs. 60.00 lacs is approved.

13. *Strengthening of Inspection Staff*—(Rs. 100 lacs)

The main objective of this ongoing scheme is to provide additional facilities to all the five districts by way of staff and equipment, to strengthen the inspectorate staff.

To make education a real instrument for socio-economic transformation, it is very essential that every child should be given good and quality education to meet the challenges of the modern age. Eventually, it is very essential that the teacher and the taught should be provided on the spot guidance in the latest methodology and the new contents of courses particularly in the light of the new National Education Policy. The inspection and supervisory staff should be strengthened adequately to provide on the spot guidance to the teacher and the taught and to solve other problems relating to education without any delay. It is therefore, proposed to create new posts in the existing five districts and to create two more districts for effective and efficient control over education,

Emphasis is laid on the following goals :—

1. To create new districts and zones.
2. Creation of new posts in the districts as per norms.
3. Creation of monitoring evaluation and co-ordination cell in each districts with supporting staff.
4. Provision of vehicles for efficient supervision and inspection.

During 1987-88, one new district was created for which 6 posts were sanctioned.

It is proposed to create two more districts during 8th plan period, for effective control over the increasing number of schools. To reduce the burden on the zone, it is proposed to keep 7 zones uniformly in each district, thereby bringing the total number of zones to 49 instead of 28 zones at present. This will also enable the Deptt. to attend to the grievances of teaching and non-teaching staff numbering about 60,000.

It is also proposed to create one post of Education Officer (Co-ordination) in each district, to co-ordinate between the districts and the Head-quarters in all educational matters and one post each of Asstt. Legal Advisor for all the districts.

Normally, a district comprises of 240 to 250 schools. Each district at present has more than 250 to 280 schools with about 2.25 lacs students enrolled. Undoubtedly, this is too big a unit to have effective and efficient administrative control. To ease the situation it is very essential that two more districts be created with adequate staff.

1. As per provision of Act & Rules every recognised school should be inspected at least once in each academic year.
2. Every education officer is normally required to inspect and guide 1000 teachers.
3. Zone should not have more than 30 schools.

The following posts are proposed to be created during the year 1992-93 :—

Joint Director of Education (Personal Branch)

S. No.	Name of the post	No. of posts
1.	J. D. E. (Edu.)	7
2.	A. D. E. (Edu.)	7
3.	Steno	7
4.	Head Clerk	7
5.	U. D. C.	7
6.	L. D. C.	7
7.	Class IV	14
8.	Driver	7
Total		63

(i) Deputy Director of Education (Personal Branch)

S. No.	Name of the post	No. of posts
1.	D.D.E. (A.)	2
2.	Steno	2
3.	Head Clerk	2
4.	U.D.C.	2
5.	L.D.C.	2
6.	Peon	2
Total		12

(ii) Administrative Branch

S. No.	Name of the post	No. of posts
1.	A.O. (Admn.)	2
2.	Supdt.	2
3.	Asstt. Legal Advisor	7
4.	U.D.C.	4
5.	L.D.C.	2
6.	Class IV	2
7.	Despatch Rider	7
Total		26

(iii) Accounts Branch

S. No.	Name of the post	No. of posts
1.	A O. (Accounts)	6
2.	J.A.O. (Accounts)	2
3.	U.D.C.	3
4.	L.D.C.	6
5.	Peon	2
Total		19

(iv) Zones

S. No.	Name of the post	No. of posts
1.	Education Officer	12
2.	Dy. Education Officer	12
3.	Supervisor (Phy.)	12
4.	Asstt./Head Clerk	12
5.	U. D. C.	24
6.	L. D. C.	12
7.	Steno	2
8.	Class IV	12
Total		98

(v) Planning, Monitoring, Statistical & Enforcement Cell

It has been emphasised time and again that all planning should start at the district level. At present, there is no machinery for planning, monitoring and co-ordinating at the district level. A small statistical cell was created during 1986-87 with one Stat. Asstt. It is proposed to create the following posts for planning, monitoring and co-ordinations at the district level :—

S. No.	Name of the post	No. of posts	Pay scale
1.	Dy. Director of Edu. (Plg.) for head quarter	1	3000-4500
2.	Asstt. Director of Edu. (Plg.)	7	2200-4000
3.	Statistical Officer	8	2000-3500
4.	L. D. C.	9	950-1500
5.	Statistical Investigator	14	1200-2040
6.	Steno	8	1200-2040
7.	Class IV	7	750-940
Total		54	

It is proposed to purchase a Gypsy and a Motor Cycles for each distt. for effective and adequate mobility of inspection staff for conducting inquiries, surprise visits etc. Telephones may be provided at the residences of the D. E. O. and E. O. of the districts to enable them to work smoothly and efficiently.

2 posts of Addl. D.E. (Admn.), IAS Cadre, are also proposed to be created to look after the Administration work etc. of all the Distts. and to serve as an effective line between the Director of Education and the Distt. Admn. and some of the duties of the Director of Education will also be assigned to them.

A provision of Rs. 65.00 lacs has been made for the 8th Five Year Plan 1992-97 including Rs. 13.00 lacs for the Annual Plan 1992-93.

14. Stg. of Correspondence Course—(Rs. 150 lacs)

The Patrachar Vidyalaya (School of Correspondence Course) is the first institution of its kind to impart education at Secondary and Sr. Secondary (+2) level through correspondence in all the three streams viz. Humanities, Commerce and Science. Its main object is to cater to the needs of school drop-outs, housewives, personnel of Armed or Para-military forces who are posted at far flung areas and who have a desire to continue their education. Those who cannot afford to join regular schools due to one reason or other and want to learn while earning also join the Vidyalaya.

The Vidyalaya started functioning in 1968 with a meagre enrolment of 880. The popularity of the technique of teaching through correspondence increased and its enrolment in 1988-89 was 24,892. Many new subjects, like Insurance, Sociology and Urdu etc. were added to its scheme of studies. The continuance of the scheme was more than justified by the number of students benefitted by it. Against the 7th Five Year Plan Target of 96,000, the actual physical achievement was 1,07,000.

The Vidyalaya has to organise many programmes so that the students are in a position to study themselves.

The study material in the shape of printed lessons in all the subjects is supplied to every student. Contact classes are arranged at ten centres in Delhi for about 25 days. These classes are run on Sundays and Holidays. The Students are asked to solve the questions in the Assignments at the end of each lesson and send their response sheets (answer to questions) to the Vidyalaya. These sheets are checked, corrected and assessed and are sent back to the students for their guidance. Remedial Classes are run for Board's class students (X and XII Classes) so that they learn how to attempt questions, in the examinations.

The above programmes are organised besides the regular features like finalisation of admission, submission of examination form to C.B.S.E., Receipt of examination, Admit Card and its dispatch to students, supply of study materials, receipt of examination result Mark Sheet etc. from C.B.S.E., its dispatch to students, preparation of provisional certificates and its dispatch to students and finally receipt of certificates from C.B.S.E. and its dispatch.

The enrolment of students of correspondence course increased from 22,000 during 1987-88 to 25,000 in 1988-89. During 1990-91 the enrolment was 25,000.

It is proposed to decentralise the admission and examination work in view of the increase in enrolment. This can be done at ten different centres in Delhi five for girls and five for boys. These centres will be the same where contact classes are held. One teacher and one clerk from the Vidyalaya will be sent to each of the centres as coordinators and they will function under the Supervision of the Principal of the school. This will involve a nominal expenditure of about Rs. 44,000 per annum but will greatly enhance efficiency and will save a lot of botheration to the student community.

It is proposed to pay Rs. 500/- per month as honorarium to the Principal of the school for a period of 4 months (15th July to 15th November) and Rs. 20/- per day as conveyance charges to each of 20 coordinators for about 80 working days in a year. The details of expenditure per annum will be :—

1. Honorarium to 10 Principal @ Rs. 500 per month	$10 \times 500 \times 4$	=20,000
2. Conveyance charges to 20 coordinators @ Rs. 20/- daily for 80 days in a year	$20 \times 20 \times 80$	=32,000
		<hr/>
Total for one year 1992-93		52,000
		<hr/>
Total for 5 year		2,60,000
		<hr/>

The Vidyalaya which is under the supervision of a senior officer of the rank of Deputy Director of Education, must have some sort of autonomy for carrying out its day-to-day programmes.

Additional Staff Requirement

The Vidyalaya's work study was undertaken by the Administrative Reform Cell, Delhi Admn. Delhi in 1982. Then the enrolment was just 11,200. The Cell recommended that for every additional enrolment of 1,500 one post of L.D.C. be created. The Vidyalaya now requires atleast ten posts of L.D.C.'s to cope with the increased work load.

The Vidyalaya proposed to add one more subject, Psychology at (+2) stage. One post of PGT in the scale of Rs. 1640-2900 will have to be created for it. The creation of these additional posts w.e.f. 1992-93 will entail an expenditure of Rs. 3.50 lacs per year.

A sum of Rs. 150.00 lacs has been approved for the 8th Five Year Plan 1992-97 including Rs. 25.00 lacs for the Annual Plan 1992-93.

15. Estt. of Evening Schools—(Rs. 25 lacs)

The main objective of the scheme is to encourage adults who could not fulfil their desire for study due to certain adverse circumstances. The 1st Adult Evening School was started by the Directorate of Education during 1968-69. This school gained much popularity. Consequently more schools were opened. At present there are 4 Senior Secondary Schools and 8 Secondary Schools for adults running in different areas of Delhi. The present enrolment is approximately 6,000 adults. In these schools Part-time P.G.T.'s and T.G.T.'s have been employed on a fixed monthly remuneration of Rs. 625/- and Rs. 500/-. Consequent upon the revision of pay scales of teachers, it is proposed to revise the scale to Rs. 750/- and 650/- P.M. for P.G.T. and T.G.T. respectively.

Rs. 25.00 lacs has been approved for the 8th Plan 1992-97 including Rs. 2.00 lacs for the Annual Plan 1992-93.

16. *Study Camps/Study Corners for Students residing in Rural Areas, J. J. Colonies, Resettlement Colonies etc. (Rs. 20.00 lacs)*

The students of rural areas, J.J. Colonies and resettlement colonies find it difficult to pursue studies after and before school hours due to shortage of accommodation and improper atmosphere for studies on account of poor socio-economic conditions.

It is proposed to start study corners in the Schools/Panchayat Ghar/Community Centres located in rural, J.J. and resettlement colonies for the students living in these areas. The students will not only get space for study but will also be able to make use of library books. The students will be issued library cards for the issue of books by the librarian of the school concerned. Since this will be an additional burden on the librarian as well as the head of the institution, they will have to be compensated. Apart from this, the libraries will also have to be updated.

Accordingly, it is proposed that the head of an institution as well as librarian may be paid Rs. 500 and 400 respectively for the additional burden to be shared by them. Staff of Adult Education can be deployed for supervision. Besides, provision of Rs. 10,000 for each school for updating the library is to be made. During 1992-93 five schools from each district will be covered under this scheme and during 8th Plan 100 schools will be covered. A sum of Rs. 20 lacs has been approved for the 8th Plan 1992-97 including Rs. 3 lacs for the Annual Plan 1992-93.

17. *Improvement of Science Teaching facilities in schools—(Rs. 120 lacs)*

Under the scheme, the following programmes are being implemented :—

1. Improvement of facilities for teaching of science.
2. Provision of separate labs. (Phy., Chem., Bio.) in Sr. Sec. Schools.
3. Provision of General Science labs. in Middle Deptts. of Sr. Sec. Schools.
4. Provision of General Science labs. for Middle Schools.
5. Provision of General Science equipment for Primary Deptt. of Sr. Secondary Schools.

In the 7th Five Year Plan efforts were made to provide science equipment, furniture, books, L.P.G. connection in Science labs. and other relevant material for proper teaching of science in schools. More emphasis was given on the experimental side of science teaching so that the teaching of science becomes more meaningful.

Under the new pattern of education, teaching of science has been made compulsory in IX and X classes of all the schools in Delhi. Elective science subjects are taught in about 340 Govt./Aided schools at Sr. Secondary classes. Besides this, science is also taught as a compulsory subject in 250 Middle Schools. All these schools are to be provided with additional science equipment due to additional and changed syllabi.

Every year the number of students is increasing. To accommodate these students, on an average 30 new schools are being opened every year. Taking an average of 20 new Secondary Schools, 10 Sr. Sec. Schools upgraded with Science

subjects, upgraded/bifurcation of existing schools (about 30 schools), the yearwise financial implication as under :

Particulars	(Rs. in lacs)				
	1992-93	93-94	94-95	95-96	96-97
For existing Schools	20	20	21	23	24
Sr. Sec. Science labs. equipments					
For Sec. Schools/Sec. Science labs. of Sr. Sec. Schools	6	6	6	6	7
For Middle Schools Science labs.	2	2	2	2	2
For newly opened Middle/Upgraded/bifurcated schools	8	8	8	8	8
For newly upgraded Sr. Sec. School with Sc. subjects at +2 stage	7	7	7	8	9
Total Rs. :	43	43	44	47	50

Rs. 120.00 lacs has been approved for the 8th Five Year Plan 1992-97 including Rs. 30.00 lacs for Annual Plan 1992-93.

*18. Re-organisation and Expansion of Science Teaching throughout School stage--
(Rs. 100 lacs)*

Reorganisation and expansion of science teaching aims at improvement of teaching of science at different levels of school education. The programmes are :—

1. Development of new syllabi at Primary, Secondary, Middle and Sr. Sec. level of school education.
2. Development of new instruction material.
3. Training of science teachers and educators at different levels and In-service teachers training programmes.
4. Equipping the institution with science material for effective learning-teaching process.
5. Introducing of new revised syllabus in the schools.
6. Organisation of Science Exhibition at various levels.
7. First stage National Talent Search Examination for the students of U.T. of Delhi.
8. Measurement, Evaluation and talent search.
9. Supervision and guidance in the schools.

The Directorate of Education has 4 Science Centres.

Each Sc. Centre supervises and guides the teaching of science in schools. Each centre has to cover 80 Sr. Sec. Schools, 130 Secondary and 60 Middle Schools on an average. To accelerate this work, it will be in the interest of Science education as well

as the exchequer that each Science Centre should have atleast One Diesel Van/Jeep for collective visit to the schools. However, proposal for only Two Jeeps/Gypsy Van have kept during the 8th Five Year Plan.

With the establishment of the 5th Educational District i.e. Central District, 5th Science Centre is essential as per Delhi Education Act. Provision of 5th Science Centre and proposal for 6th Science Centre has been proposed during the 8th Five Year Plan.

Achievements

During the 7th Five Year Plan about 60 Primary, 270 Middle, 190 Secondary and 250 Sr. Sec. Schools were covered under this scheme. Workshops, Seminar, Study circle, Meeting and Inservice training programmes, refresher and orientation courses were organised for different categories of Teachers, Lab. Asstts. and Principals. About 2000 teachers were benefitted.

Enrichment programmes/camps were also organised for talented and backward students.

Physical Target

The physical targets of the 8th Plan will be as follows :

1. Revision of syllabi.
2. Modernisation of text material.
3. Preparation of guidance material.
4. Inservice training programmes.
5. NTS 1st stage Examination.
6. Supervision and guidance in schools.
7. Organisation of Science Fairs at various levels.

Sanctions for various science based work experience (SUPW), programme like Agricultural Education are being issued to schools throughout the year by the Science branch. Every year about Rupees One Crore is issued to the schools. Besides this a huge amount is utilised in various teachers training programmes and Central Sponsored Scheme. It needs proper planning to achieve the goal. To carry out planning and budgeting work in respect of various programmes under the scheme Post of Statistical Assistant is proposed. A science background person will be most useful for this post.

Establishment of 5th Sc. Centre is proposed. The required strength of new centre will be at par with other existing Science Centres. For the smooth conduct of work in a Science Museum one post of Asstt. Curator, One post each of Head Clerk, UDC and Steno at each Sc. Centre is proposed which may be filled with the promotion of Museum Assistants already working in Sc. Centre.

Provision for Office Expenses, Payment for spl. services, seminar, workshop (Academic programmes), Science Fairs, N.T.S. Examination, Eqpts., Machinery for Centres/Museum/Workshops/Schools, purchase of vehicle, maintenance of vehicle

P.O.L., Publication, Office Exps. for 5th and 6th Sc. Centre, Establishment Charges for 5th Sc. Centre and Addl. staff for Science Branch is also made in the proposal.

The following posts are proposed to be created under the scheme :—

ESTABLISHMENT OF 5th SCIENCE CENTRE

S. No.	No. of posts	Scale of Pay Rs.
1. A.D.E. (Sc.)	1	3000-4500
2. Sr. Sc. Counsellor	3	3000-4500
Total :	<u>4</u>	

Establishment :

1. Jr. Sc. Counsellor	3	1640-2900
2. Keeper, Curator	1	1640-2900
3. Workshop Incharge	1	1400-2600
4. Librarian	1	1400-2600
5. Museum Assistant	1	1200-2040
6. Lab. Asstts.	3	1200-2040
7. Mechanic/Carpenter	3	950-1500
8. U.D.C.	2	1200-2040
9. L.D.C.	1	950-1500
10. Workshop Instructor	1	1400-2600
11. Head Clerk	1	1400-2300
12. Steno	1	1200-2040
13. Class-IV (Chowkidar-1, Peon-2, Sweeper-1)	4	750-940
Total	<u>23</u>	
G. Total	<u>27</u>	

II. For Science Branch (Addl. Posts)

		Rs.
1. Science Statistical Assistant	1	1640-2900/ 1400-2600
2. Asstt. Curator	1	1400-2600
3. L.D.C.	1	950-1500
4. Driver	1	950-1500
5. Chowkidar	1	750-940
Total	<u>5</u>	

Rs. 100 lacs has been approved for the 8th Five Year Plan 1992-97 including Rs. 12.00 lacs for the Annual Plan 1992-93.

19. Educational Television—(Rs. 30.00 lacs)

The main aim of the scheme is to supplement class room teaching and to provide guidance, training and incentives to the teachers to make class-room teaching not only effective and purposeful, but also interesting with the liberal use of models, charts, demonstrations, films strips, slides etc.

The television medium is universally accepted as an effective medium of communication. Through this medium thousands of students have access to talented teachers & also to a variety of teaching aids, which class room teachers find difficult, if not impossible to include in their day-to-day teaching.

Educational TV was launched in 1961 to supplement class room teaching in various subject specially in Science subjects.

The programme contents are purchase of TV sets & supply to the schools of Delhi, Maintenance of TV sets & preparation of school television lessons etc. provisions for purchase of CTV sets, Vehicle, spare parts of TV sets and petrol etc. is included in the 8th Plan and A.P. 1992-93 proposals. Spot evaluation of this programme is done in schools regularly & the result is found effective.

The STV is becoming very popular with the students especially CTV sets as all the programmes are in colour. The lessons are being given special attention so that the quality of lessons keeps on improving.

A sum of Rs. 30.00 lacs has been approved for the 8th Five Year Plan 1992-97 including Rs. 10.00 lacs for Annual Plan 1992-93.

20. Educational & Vocational Guidance—(Rs. 20.00 lacs)

The aims of guidance are both adjustive and developmental. It helps students in making the best possible adjustment with other students in schools and in the home. It also facilitates the development of all aspects of his ability. Guidance, should be regarded as an integral part of education. It is meant for all students and not just for those who deviate from the norms in one direction or the other. It is a continuous process aimed at assisting the individual to make decisions and adjustments from time to time.

Guidance services contain the following :

1. Orientation services
2. Individual Inventory services
3. Information services
4. Counselling, Reseach and Evaluation and follow up services.

Educational and Vocational Guidance Services were started in 1959 with the recommendations of the Mudaliar commission. Kothari commission (1964-66) again emphasised the importance of guidance services and considered it an intergral part of Education. These services are a necessary imput for national development, in the context of the nation's educational policies. With the recommendations of the Secondary Education Commission guidance services gained momentum in Delhi

More and more students were benefitted through the E. V. G. Counsellors in schools. Vocationalisation of education has increased the need for Guidance services. There are 137 E. V. G. Counsellors working in 217 schools at present.

To supervise the work of these E. V. G. Counsellors the E. V. G. Bureau has the following staff :

1. Guidance Officer	1
2. Counsellor-in-charge	2
3. E. V. G. Counsellors	2
4. Steno	1

E. V. G. Bureau performs the following functions:—

1. Implementation and co-ordination of Guidance Programme in Delhi Schools.
2. Conduct surveys and research in the field of guidance.
3. Supervision, inspection and follow up guidance work done by E.V.G. Counsellors and Career Masters.
4. Preparation and revision of norms of different Psychological tests.
5. Organising work shops, conferences/meetings, seminars, orientation refresher & training programmes for administrative & guidance personnel.
6. Training of Career Masters.
7. Psychological testing of referral cases and imparting educational & vocational guidance to such cases.
8. Helps the candidates in selecting the various courses and occupation according to their interest abilities and aptitudes.
9. Preparation of audio-visual aids and material related to guidance.
10. Collect, compile and disseminate educational & Vocational information to students and parents through various media.
11. Conduct admission test in Model Schools of Delhi.

The E. V. G. Counsellors posted in schools of Delhi are performing the following duties :—

1. Psychological testing Educational/Career talks.
2. Personal guidance & counselling, including parents.
3. Setting up of an information Centre/Career Corner.
4. Vocational guidance and career counselling.
5. Preparation of Bi-variate Charts (comparison of intelligence achievement test scores to locate under achievers) charts, posters, information cards etc.
6. Arranging special programmes like career conference career day planned tours and maintenance of guidance records.
7. Taking up special projects like improving truancy etc.

8. Identification of gifted children and suggestions to provide appropriate enrichment.
9. Providing Vocational development by familiarising them with the world of work.
10. Collect and compile vocational information for personal guidance.

At the School Level

There are 137 E. V. G. Counsellors working in 217 schools benefitting (approximately) 2 lacs children. During the 8th Five Year Plan it is proposed that at least 75% of our secondary and senior secondary schools are covered thereby benefitting an additional 1.40 lacs (approximately) children and raising the total number of beneficiaries to 3.40 lacs. This will require the creation of an additional 150 posts of E.V.G. Counsellors in schools. This will be done by getting 30 posts of E. V. G. Counsellors (Rs. 1640-2900) created in 30 schools every year during the 8th Five Year Plan period.

At District Level

Under the expansion Programme, it is very essential to supervise the services at district level so that E. V. G. Counsellors working in the schools should get timely suggestion & guidance for proper implementation & effective working. During the 8th Five Year Plan, it is proposed to create 10 posts of Counsellor-in-charges (2000-3500) two in each of five districts with the supporting staff of 5 LDC's and 5 class IV employees.

At Bureau Level

In the 1st year of the 8th Plan the Bureau proposes to strengthen the research wing in the field of guidance for collecting, compiling and disseminating educational & vocational information, by creating one Research Officer (2000-3500), one occupational information officer (2000-3500). These two posts may be sanctioned through departmental promotions. One post of Research Assistant (1640-2900) is proposed along with one LDC (950-1500), one Steno (Eng.) (1200-2040), one Typist (950-1500), one Gestetner Operator (775-1025), one class IV (750-940), one Sweeper (750-940) and one Driver (950-1400). During 1992-97 one Assistant Director (Guidance) (3000-4500) with one Steno and One Deputy Director (Guidance) (3000-5000) are proposed to be created and filled through D.P.C. on the basis of seniority.

One Administrative Officer (2000-3500) and one Steno (1200-2040) and one UDC (1200-2040) are also proposed to be created as supporting staff.

For supervision and inspection of schools with guidance services and district/zonal guidance centres, one staff vehicle is proposed at the Bureau. An electrostat machine and one type-writer are also needed.

Psychological tests materials furniture, career, literature, books and other equipments should be provided to schools and Bureau. Rs. 20.00 lacs has been approved for the 8th Plan 1992-97 including Rs. 5.00 lacs for Annual Plan 1992-93 to implement the scheme.

21. *Educational Tour—(Rs. 40.00 lacs)*

This scheme envisages educating school students of Delhi about Indian Culture and history by sending them to places of historical importance. It is proposed that every year one group of 50 students including teachers/official be sent outside India to gain knowledge of the culture and history of friendly countries.

For the 8th Plan 1992-97 an outlay of Rs. 40.00 lacs including Rs. 6.00 lacs for the Annual Plan 1992-93 is approved under the scheme.

22. *Mobilisation of Community Resources—(Rs. 10.00 lacs)*

Under this scheme Matching Grants equivalent to funds mobilised by P. T. A. is sanctioned to the schools for the following activities :—

1. Sanction Improvement.
2. Awards to deserving students.
3. Providing fixtures and material for school beautification.
4. Provision of fans, cold drinking water; public address system, gardening, horticulture, hobby classes for student, audio-visual aid.

Rs. 10.00 lacs is approved for the 8th Plan 1992-97 including Rs. 1.50 lacs for the Annual Plan 1992-93.

23. *Merit Awards to Students and Schools—(Rs. 5.00 lacs)*

This scheme was introduced in 1985-86 to improve the examination result of schools and providing incentives to students and schools. The details are as under :—

- | | |
|--|-------------------------------------|
| 1. Schools who have shown cent percent result in Sec./Sr. Sec. Board Exam. | Award Rs. 101 (Shield) each Schools |
| 2. Schools who have shown 25% appreciation in Board Exam. | do |
| 3. Schools who have shown 90% result in Board Sec./Sr. Sec. Exam. | Merit Certificate |
| 4. First 3 students in Sr. Sec. Exam. in Science, Commerce, Humanities and Voc. Groups | Rs. 1100/- Each Students |
| 5. All India Sr. Sec. Exam. (Delhi Students only) | do |
| 6. First 3 students in Delhi Sec. Board Exam. | do |
| 7. All India Sec. School Exam. (Delhi Students only) | do |

An amount of Rs. 5.00 lacs is approved for 8th Five Year Plan 1992-97 including Rs. 0.10 lac for Annual Plan 1992-93.

24. Agriculture Education|Craft--(Rs. 30.00 lacs)

Agriculture Education should be an effective means to educate the rural youth in the improved methods of cultivation so that they may be of help in increasing the productivity of agriculture. It is necessary to re-organise Agriculture Education mainly for :

1. Improving agricultural production.
2. Appreciating and adopting the improved methods and improved types of agriculture implements.
3. Preparing the students for higher studies in this field and for self employment.

Programme Contents

- (1) To study/develop/modify the existing syllabus of agriculture in order to make it more useful and to prepare instructional material for the same.
- (2) To orient the teachers and the teachers educators about the techniques to be adopted by organising in service academic programmes.
- (3) To equip the institutions/agriculture unit with necessary equipment and materials.
- (4) To supervise the working of Agriculture Education and provide on the spot guidance in schools and matters related to this subject.
- (5) To introduce agriculture as a discipline in more schools for the benefit of the rural population.

At present agriculture is being taught as a subject in 26 schools (out of which 3 are aided schools). In almost all the schools minimum facilities regarding land/water/teachers etc. are available. It may be noted that about 1 acre of land is more than sufficient in connection with teaching of this subject.

Agriculture as a stream is not yet introduced. However in a teachers workshop held in Jan. 1987, it was resolved that for better placements as well as for higher studies, students may offer agriculture in the existing science stream of CBSE (preferably in place of Mathematics) in addition to Arts stream. And hence, a separate agriculture stream need not be introduced.

Efforts are being made to introduce Agronomy, Horticulture/Agronomy Chemistry and pest control in a rural college under the University of Delhi in B. Sc. Class (e.g. in Shradhanand College, Alipur, where Agronomy Chemistry and pest control is already existed. Further there is a proposal to start post graduate Diploma in this subject.) The students will have various options for vertical mobility and may be able to take advantage of I.A.R.I. Pusa, New Delhi.

The SFC meeting held on 27-2-87 decided that Agriculture come under the Vocationalisation of Schools Scheme. However, it is important to note that Agriculture in Delhi schools is being taught as an academic subject and not as a purely vocational one.

The Administrative Reforms Deptt. of Delhi Admn. made a study of the requirements of posts. The following is a summary of the staff requirements and the A.R.D.'s recommendation :—

Sl. No.	Category	Pay scale	Deemed AR Deptt. study	Recom- mended by team	Remarks if any
1.	ADE (Agr.)	3500-4500	1	—	—
2.	Field Advisors	3500-4500	3	1	—
3.	Dy. Fld. Advisors	2000-3500	3	—	—
4.	Subject experts	1640-2900	3	3	—
5.	U.D.C.	1200-2040	1	1	—
6.	Stenographer	1200-2040	1	1	—
7.	L.D.C.	950-1500	1	1	—
8.	Mali	750-940	1	1	—
9.	Other Class IV	750-940	1	—	—
10.	Driver	950-1500	1	1	For Driver subject to purchase of Tractor
11.	Beldar (For schools)	750-940	25	24	
		Total :	<u>41</u>	<u>33</u>	

Other activities of the Agriculture Unit

1. To look after all matters related with Agriculture Education and general supervisions.
2. Financial sanctions for schools.
3. Establishment of Office for public dealing (Agriculture Schools).
4. Purchase of Agriculture Implements and their purposeful use.
5. Van Mahotsav and tree plantation programme and its implementation are looked after by this unit. This unit is the link between the Directorate of Education and the Delhi Admn. in this regard.
6. Co-ordinating between the Directorate and (i) CBSE and (ii) D.U. for putting Agriculture Education and proper footing.
7. Fencing of Agriculture Farm land of schools providing water to schools.
8. Conservation of Nature, Ecology, Wild life, Tree Plantation, Green Revolution, Environment studies etc.
9. Setting up of Nurseries in schools.

At present agriculture is being taught as a subject mainly with the arts stream. Efforts are being made to introduce Agriculture as a stream and start Agriculture Education at the College level under Delhi University.

It is suggested that students may be allowed to offer Agriculture in the existing science stream of CBSE in addition to the arts stream. This shall provide better placements opportunities for students. Statistics shows that the subject is popular in rural schools.

Feasibility of the Scheme and Economic Utility

The scheme is feasible, provided, basic requirements of establishment Agriculture Unit and other provisions are met.

Agriculture education shall obviously help in improving the economy of the country as a major portion of the rural population still depends on Agriculture.

It is also proposed to impart rural based craft education to the students of the 8th to 11th classes.

Rs. 30 lacs has been approved for the 8th Five Year Plan 1992-97 including Rs. 5 lacs for Annual Plan 1992-93 under the scheme,

25. Vocationalisation of Education in Schools (Work Education)—(Rs. 1000 lacs)

The Education Commission (1964-65) recommended educational reconstruction by linking education with productivity and by improving the quality of education. The National Policy on Education, 1986 provided a thrust to Vocational Education. Vocational Education is meant to enhance individual employability reduce the mis-match between the demand and supply of manpower and to provide skills to those who are pursuing higher education without particular interest or purpose.

Vocational Education is a distinct stream intended to prepare students for identified occupations spanning several activities. A target of bringing the 25% of the student population under vocational education has been set for the 8th Five Year Plan.

Objective of the Scheme

- (i) To link education with productivity.
- (ii) To make students more employment-worthy and capable of seeking self/wage employment.
- (iii) To familiarise students with technical knowledge and skills.
- (iv) To attract a sizeable segment of the student population to various vocational courses so as to reduce the mad-rush for higher general education.
- (v) To meet the demand for skilled manpower.

Programme Contents

- (i) To conduct vocational surveys to identify vocational needs so that need based vocational courses are introduced.
- (ii) To conduct workshops for development of curricula, development of textual material, resource material and manuals etc.
- (iii) To equip vocational institutions.

- (iv) To develop school industry linkages.
- (v) To orient teachers and educators about the techniques involved in teaching various vocational courses.
- (vi) To provide academic support to the programme. A State institute of vocational courses is proposed to be set up under the scheme.
- (vii) To meet the target of bringing 25 percent of the student population under vocational education at the +2 stage. This involves providing an adequate teaching and management structure at these levels.
- (viii) To expand the Vocational Education Programme by introducing various courses in nearly 100 sections in various schools so that a target of 15 percent diversification is achieved during the year 92-93.
- (ix) To open a 'District Training Centre' for one Education Distt. to provide technical expertise and advance training to the students/teachers of the vocational schools.
- (x) To implement the Centrally Sponsored Scheme on Vocationalisation of Education and to meet the State Share of the said scheme.
- (xi) To provide regular/part-time teachers to teach various vocational courses.
- (xii) The scheme will be implemented in Sr. Sec. Schools at the +2 stage in the vocational stream.
- (xiii) To popularise the Vocational Education Programme through the Press and other mass-media.
- (xiv) To implement Non-Formal Vocational Education Programme at 20 Centres.

Provision for purchase of Six Vehicles, one for State Institute of Vocational Education (SIVE) and one each for 5 District Vocational Training Centres during the Plan period.

The scheme has been approved by SFC of Delhi Admn. The scheme of Vocationalisation of Education was started in the academic year 1977-78 and was continued in 7th Plan.

An additional 2000 students are proposed to be covered by the scheme during 1992-93. Vocational courses have been introduced in 140 Govt./Aided Senior Secondary Schools.

The following table indicates the target for 92-93 :—

S. No.	Items	Targets for 91-92
1.	Introduction of new subjects	50 Schools
2.	Sections	100
3.	Study circle/meetings for the teachers/principals of vocational schools.	20
4.	Seminar	1
5.	Exhibition of various activities	1

BOTTLENECKS AND CORRECTIVE MEASURES

- (i) Lack of regular teaching staff for vocational subjects in schools.
- (ii) Adequate management system has not been provided for implementation and monitoring the scheme.
- (iii) No opportunities have been identified for self/service employment for the 'pass outs' of the vocational courses.
- (iv) Linkages with various industries for training and placement of students.
- (v) Lack of mass-media and other support for educating parents and students regarding the scheme.
- (vi) Lack of textual material.

The following remedial measures have been taken/are proposed to be taken.

(a) The following posts were sanctioned :—

I. Posts sanctioned during 1990-91

S. No.	Posts	No. of posts	Pay-scale
1.	Dy. Director of Education (Voc. Edu.)	1	3000-4500
2.	District Training and District Placement Officer/Co-ordinator	5	3000-4500
3.	Superintendent (DASS)	1	1640-2900
4.	SAS Accountant	1	1640-2900
5.	Survey Officers/Research Officers	1	1640-2900
6.	P. T. G.	9	1640-2900
7.	Vocational Education Officers	5	2000-3500
8.	U. D. C.	3	1200-2040
9.	Stenographers	6	1200-2040
10.	Investigators	4	1200-2040
11.	Lab. Assistant	66	1200-2040
12.	L. D. C.	12	950-1500
13.	Peon	7	750-940
Total		121	

II. Posts sanctioned during 1988-89

1.	P. G. T.	57	1640-2900
2.	Lab. Assistant	15	1200-2040
3.	Part-time Teachers	57	Rs. 800/- per month is fixed.
4.	Driver	1	950-1500
Total		130	
Grand Total		251	

Efforts are being made to fill up the posts.

- (b) The organisational structure/management system for implementation and monitoring the scheme has also been sanctioned.
- (c) The concerned authorities in the Administration are being requested to amend the recruitment rules of the posts where the vocational pass outs can be suitably employed. The Banks and Financial Institutions are also being taken for the vertical mobility for the pass outs of the various vocational courses.
- (d) Linkages with various relevant industries are to be sanctioned.
- (e) Regular teachers to teach various vocational courses are proposed to be provided in the school.

The following additional posts are proposed to be created to implement the non-formal Vocational Educational Programme.

Sl. No.	Designation	No. of posts	Pay-scale
1.	Assistant Director	1	3000-4500
2.	Training and Placement Officer	1	2200-4000
3.	Field Officer	2	2000-3500
4.	Statistical Officer	1	2000-3500
5.	Officer Supdt.	1	1640-2900
6.	Assistant	1	1400-2300
7.	Statistical Asstt.	3	1400-2300
8.	U.D.C.	2	1200-2040
9.	L.D.C.	3	950-1500
10.	Peon	2	750-940
	Total	17	

The following posts are proposed to be created for running a District Vocational Training Centre :—

Sl. No.	Posts	No. of posts	Pay-scale
1.	Principal	1	3000-5000
2.	Lecturer (One each for Engg. Commerce, Home Science)	3	3000-4500
3.	Vocational Teachers	10	1640-2900
4.	Lab. Asstt./Workshop Asstt.	10	1200-2040
5.	Accountant	1	1640-2900
6.	Steno	1	1200-2040

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7. U.D.C.	2	1200-2040
8. L.D.C.	3	950-1500
9. Workshop Attendant	10	950-1500
10. Class IV	4	750-940
Total :	<u>45</u>	

To provide academic inputs to the Vocational Education Programme like development of curriculum, textual material, resource material and for conducting inservice teachers training programme, the State Institute of Vocational Education is proposed to be established. The staff norms are in accordance with the norms prescribed under Centrally Sponsored Scheme for setting up the State Institute of Vocational Education. The State Institute of Vocational Education is being set up as the SCERT does not have adequate infrastructure and qualified personnel to look after the interest of the Vocational Education Programme in so far as the academic inputs into the programme are concerned. The following posts are proposed for this Institute :—

Sl. No.	Post	Number of posts	Pay-scale
1.	Professor	1	3700-5000
2.	Lecturer (Educational Planning)	1	3000-4500
3.	Readers	5	3000-5000
4.	Lecturers	5	3000-4500
5.	Consultants	5	2000 p.m. (fixed)
Total :		<u>17</u>	

Supporting Staff

Sl. No.	Post	Number of posts	Pay-scale
1.	Stenographer	9	1200-2040
2.	Office Supd.t.	1	1640-2900
3.	Accountant	1	1640-2900
4.	Assistant	2	1400-2300
5.	L.D.C.	2	950-1500
6.	Peons	4	750-940
Total :		<u>19</u>	

During the 8th Plan period about 310 more schools are proposed to be covered under Vocational Education Programme and 625 sections will be added. About 15,625 students are likely to be benefited. Provision for 625 regular vocational teachers in the scale of Rs. 1640-2900 is required for the 8th Plan period. It is also proposed to strengthen 200 vocational school who have more than 3 courses.

For the 8th Five Year Plan 1992-97 and the Annual Plan 1992-93, provision for establishment charges, contingencies for vocational wing at Dte. of Education, State Institute of Vocational Education, Distt. Wing and 5 District Vocational Training Centres, equipment and raw material, library books, deployment of part-time teachers, academic programmes, like workshops, seminars, study circle meetings etc. salary for the regular teachers, State Share of Centrally Sponsored Scheme, Publicity & advertisement and purchase of vehicles (7 Nos.) is included.

The following posts are required for the Vocational Wing of the Directorate to implement the Vocational Education Programme during the Plan period:—

Sl. No.	Post	Number of posts	Pay-scale
1.	Addl. Director of Edu. (I.A.S.) Senior Scale	1	—
2.	Jt. Director	1	3000-5000 + 300 Spl. pay
3.	Dy. Director	1	3000-5000
4.	Asstt. Director	2	3000-4500
5.	Distt. Co-ordinator	7	—
6.	Counsellor	7	2000-3500
7.	Jr. Counsellor	4	1640-2900
8.	Tech. Asstt.	4	1200-2040
9.	Supdt. (Gazetted)	1	1640-2900
10.	H.C./Assistant	1	1400-2300
11.	U.D.C.	4	1200-2040
12.	L.D.C.	8	950-1500
13.	Stenographers	5	1200-2040
14.	Trg. and Placement Officer	1	3000-4500
15.	Survey Asstt.	4	1400-2600
16.	Class IV	7	750-940
17.	Driver	2	950-1500
	Total	60	

The staffing patterns of Vocational Education Programme is as follows :—

**STAFFING PATTERN FOR THE VOCATIONAL WING
AT THE DISTRICT LEVEL IN 7 DISTRICTS**

Posts	No. of posts	Pay Scale
Distt. Co-ordinators	7	—
Education Officer	7	3000-4500
Training Placement Officer	7	2000-3500
Superintendent	7	1640-2900
Research Officer	7	1640-2900
Accountant/J. A. O.	7	1640-2900
U. D. C.	7	1200-2040
L. D. C.	14	950-1500
Steno	7	1200-2040
Peon	14	750-940
Driver	7	950-1500
Total Posts :	91	

**STAFFING PATTERN FOR THE DISTRICT VOCATIONAL TRAINING
CENTRE**

Posts	No. of post	Pay Scale
Principal	1	3000-5000
Lecturer (One each for Engg., Commerce, Home Science)	3	3000-4500
Vocational Teacher	10	1640-2900
Lab. Asstt./Workshop Asstt.	10	1200-2040
Accountant	1	1640-2900
Steno	1	1200-2040
U. D. C.	2	1200-2040
L. D. C.	3	950-1500
Workshop Attendant	10	950-1500
Class IV	4	750-940
Total :	45	

**STAFFING PATTERN FOR THE VOCATIONAL WING OF THE
STATE INSTITUTE OF EDUCATION**

Posts	Number of Post	Pay Scale
Professor	1	3700-5000
Lecturer (Educational Planning)	1	3000-4500
Readers	5	3000-5000
Lecturers	5	3000-4500
Consultants	5	2000/- p.m. (fixed)
Total :	<u>17</u>	
Supporting Staff		
Stenographer	9	1200-2040
Office Supdt.	1	1640-2900
Accountant	1	1640-2900
Assistant	2	1400-2300
L. D. C.'s	2	950-1500
Peons	4	750-940
Total :	<u>19</u>	

A sum of Rs. 1000.00 lacs has been approved for the 8th Five Year Plan 1992-97 including Rs. 120.00 lacs for Annual Plan 1992-93.

26. *Socially Useful Productive Work (SUPW)*—(Rs. 75.00 lacs)

Socially useful Productive Work is a Compulsory subject in the school curriculum of Govt. and Govt. Aided Schools in Delhi from classes VI to XII. There are 60 subject oriented S.U.P.W. activities in the Middle, Secondary and Sr. Sec. Classes, but 24 activities are more prominent, which are as follows :—

MIDDLE

Group-I

1. Weaving
2. Tailoring, Knitting and Embroidery
3. Toys and Doll making
4. Wood Work
5. Plastic Work
6. Leather Work

Group-II

1. **Cardboard Work**
2. **Meal Planning & Food Preservation**
3. **Macrame (Fibre work)**
4. **Papier mache**
5. **Paper work**
6. **Gardening**
7. **Block Printing**

Sec. & Sr. Sec. Classes

1. **Electronics**
2. **Electrical Gadgets**
3. **Photography**
4. **Gardening**
5. **Meal Planning**
6. **Tie & Dye**
7. **Batik**
8. **Interior Decoration**
9. **Tailoring, Knitting & Embroidery**
10. **Wood Work**
11. **Commercial Art.**

The National Policy of Education, 1986 stressed the need for this programme.

The scheme provides Rs. 750 to Middle Schools Rs. 1500/- to Sec. Schools and Rs. 1800/- to Sr. Sec. Schools for a Laboratory. These amounts will list be adequate to cope with the new thrust proposed to be provided in the 8th Plan.

The following posts are proposed to be created for the successful implementation of this scheme :

S. No.	Posts	No. of Posts
1.	D.D.E. (W.E.)	1
2.	A.D.E. (W.E.)	1
3.	Field Adviser (W.E.)	1
4.	Subject Expert	4
5.	Instructors	3
6.	Technical Assistant	2
7.	U.D.C.	1
8.	Stenographer	1
9.	L.D.C.	1
10.	Machine Operator	1
11.	Peon	1
Total :		17

Provision for purchase of Material & Equipment for schools, labs & SUPW Labs, Establishment, Academic programmes for Teachers, Principals & V. Principals, Students camps for 2000 students for 15 days duration, Library Books for schools & SUPW Library, other charges/contingency, Misc./Photocopier (repair & maintenance & its parts) is needed during the 8th Plan and Annual Plan 1992-93.

A sum of Rs. 75.00 lacs has been approved for the 8th Five Year Plan 1992-97 including Rs. 10.00 lacs for the Annual Plan 1992-93.

27. *Population Education—(Rs. 50.00 lacs)*

The Long Term Objectives of the Scheme are :—

1. To develop a deep insight into the inter-relationships between population change and the process of socio-economic development viz-a-viz. the individual, the family, the society, the nation and the world amongst students.
2. To create an awareness of the critical population growth situation in the country amongst students and teachers.
3. To re-orient the system of education to help the developmental efforts of the country and forge it as an active agent for social transformation etc.

Short Term Objectives are :—

1. To develop curricula and textual materials for Primary, Middle, Secondary and Sr. Sec. classes and for the Pre-primary, Primary, Secondary, Sr. Secondary teachers training institutions.
2. To develop training packages for training teachers of formal and non-formal sectors and orienting senior supervisory staff for proper implementation of the programme.
3. To develop exemplary lessons for school Radio and TV programmes etc.
4. To organise population Education Melas in school clusters to focus attention of children and to ensure horizontal and vertical expansion of the programme.

The population of India has increased by leaps and bounds, (an increase of 2½ times) since independence. There is an urgent need to have a subsidiary programme to ensure a reasonable standard of living in the years to come. The base of our population i.e. age group 0-14 is getting wider and wider. The least the educator can do is to create an awareness about the alarming growth of population against the limited resources available.

Delhi has to be a pacesetter for other states in the country. The need is to continue and re-inforce this programme. This programme has to cater to the special needs of primary schools of MCD, NDMC, floating population in Kendriya Vidyalayas as also of public schools. It is hoped that the small family norm and late marriages will take firm roots and population education will become a potential tool for controlling the population in the years to come.

The programme contents are :—

1. Curriculum development.
2. In-service Education.
3. Evaluation and Monitoring.

The project was started late in the 6th Five Year Plan and has yet to complete its targets.

During the 7th Plan period, about 22000 teachers were trained, published News-letters. IV to VIII and curriculum development for +2 stages, Elementary Teachers Training Institutes, Non-formal Education sector and publishing of plug points for different subjects for different stages were taken up.

During the 8th Plan period, more stress will be given to the non-formal sector.

1. All facilitators working under non-formal sector will be given training.
2. Literature will be created and circulated free of charge.
3. 'NUKKAR' type programmes and visuals will be prepared.
4. Audio-Visual programmes with the help of the Public Relations Deptt. viz. Doordarshan and Akashwani will be prepared.
5. Strengthening the programme for Institutionalising population education.
6. Annual Pop. Education Melas of 2 to 3 days duration will be held in all Pop. Education clusters.

During 1992-93, the following programmes are proposed to be taken up :—

1. Training of 1200 newly recruited teachers.
2. Training of 2000 facilitators working in non-formal sectors under different agencies.
3. Curricular programme for popularising population education concepts.

Plan funds and UNFPA funds as approved by the Govt. of India are proposed to be utilised to finance these programmes.

It is proposed to strengthen the population education cell by creating the following posts during the 8th Plan Period.

S. No.	Name of the Post	No. of Posts
1.	A.D. (E)	5
2.	Co-ordinator	1
3.	Head-clerk	1
4.	Gestetner Operator	1
5.	Peon	2

6. Waterman	1
7. L.D.C.	1
8. Librarian	1
9. Cashier	1
10. Project Operator (Film Projector)	1
11. Artist	1
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The programme will be extended to the non-formal sector, J. J. Clusters and economically weaker sections.

Rs. 50.00 lacs has been approved for the 8th Five Year Plan 1992-97 including Rs. 8.00 lacs for Annual Plan 1992-93.

28. *State award to teachers—(Rs. 15.00 lacs)*

40 teachers are given state awards every year for their meritorious services under this scheme. They also receive a cash prize of Rs. 5000/- each with one Silver Medal and a certificate of Merit.

Rs. 15.00 lacs has been approved for the 8th Plan 1992-97 including Rs. 3.00 lacs for Annual Plan 1992-93.

29. *Development of Libraries for Teachers—(Rs. 10.00 lacs)*

The state institute of Education established eight teachers Reference Libraries (two in each district). The main objective of these Libraries is to provide facilities to teachers for intensive study in different fields. This is an on going scheme under which books are being purchased every year and added to these libraries.

In 1984 Administrative Reforms Deptt. under took a study of the working of these libraries and the assessment of staff of these libraries. As per the recommendations, the deptt. is enriching libraries with books. The main objection is that the libraries are manned by LDCs who are untrained. A post of Asstt. Librarian for better utilisation of these libraries, is therefore, required.

Additional posts are also required to man the library of the STE unit. This library consists the distt. libraries. The posts required are as follows :

		Rs.
1. Senior Librarian	1	2000-3500
2. Librarian	1	1400-2600
3. Asstt. Librarian	7	1200-2040
4. L.D.C.	1	950-1500
5. Library Attendant	3	750-940
6. Peon	2	750-940

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A sum of Rs. 10.00 lacs has been approved for 8th Five Year Plan 1992-97 including Rs. 2.50 lacs for Annual Plan 1992-93.

30. *G.I.A. to State Council of Educational Research & Training—(Rs. 243 lacs)*

The State Council of Educational Research and Training (SCERT) was established as an autonomous body under Delhi Admn. on 27th May, 1988. Four District Institutes of Education and Training (DIET) have already been established under the over all administrative control of SCERT. The fifth DIET is also to be established in 1992-93.

The Plan and programmes of SCERT envisage bolstering up educational activities in Delhi to give practical shape to the ideas contained in the National Policy on Education (NPE) 1986 and the programme of Action (POA). They aim at :—

- (i) Improving Teacher Training Programmes at Pre-primary, Primary, Secondary levels.
- (ii) Improvements in the school curriculum to help children to meet new challenges.
- (iii) Integrate research with educational practice by making it field-based and action-oriented so as to enable the policy makers and educationists to make use of the findings of research.
- (iv) Organising extension activities for the benefit of teachers to keep them abreast of the latest developments in the field of education.
- (v) Bringing out useful publications for teachers on all aspects of school education to enable them to come out with innovative and creative ideas so essential for the growth of the system.
- (vi) Aiding, promoting and coordinating new thrusts in education such as education technology, non-formal education, adult education, education of disadvantaged children, special education, girls education, early childhood education etc.
- (vii) Giving concrete shape to the idea of cultural instruction as contained in POA by introducing it in teacher training programmes and developing instructional material for teachers to take up such instruction in schools.

To achieve the above objectives SCERT proposes to take up the following programmes :—

1. Teachers Training Programme.
2. Strengthening of SCERT.
3. Strengthening of DIETs.
4. Establishing State Development Group & Educational Innovation/Inter Sectoral Project.
5. Institution of Certificate Diploma Courses for Computer Education.
6. Establishment of Centre for Inservice Teachers Education (CITE)
7. Appointment of Consultants to strengthen academic programmes of SCERT.

8. Visit of staff of SCERT/DIETs to institutions of National and International Importance.
9. Strengthening of Library/Documentation/Publication Centre Programmes.
10. Establishment of educational video programme production studio/STV production studio.
11. Capital Component.
12. Preparation of collateral materials for various stages of school education.
13. College of Teacher Education.

1. Teacher Education

Under the programme of In-service Education of teachers every teacher should be given a months training once in every five years.

There are about 30,000 teachers working at the Secondary level in Delhi Administration schools. The SCERT will train 6000 teachers every year through its centres of In-service Teacher Education. In the area of early childhood education, refresher courses and innovative programmes for trained pre-primary teachers will be organised to improve the quality of pre-primary Education. For various training programmes the SCERT will have to incur expenditure on Resource persons, participating teachers, provision of material and other related items of expenditure.

2. Strengthening of SCERT

It is proposed to open new Departments viz :—

- (i) Department of Education in Science and Mathematics.
- (ii) Department of Education in Humanities and Social Science.
- (iii) Physical and Art Education.
- (iv) Department of Education of Disadvantaged groups.

The main functions of these departments will be as under :—

- (i) To focus on the specific issues related to content, teaching, learning strategies, evaluation research.
- (ii) To develop suitable curriculum for children.
- (iii) To organise training in Orientation Programmes for teachers Education Officers and Sr. Councillors in respective areas.
- (iv) To organise training programmes for teachers in curriculum & development, evaluation and action research.

The following Posts are proposed to be created :

(1) Department of Science and Maths

Posts	No. of posts	Scale of Pay
Reader/HOD	1	3700-5700
Sr. Lecturer	5 (one each for Phy., Chem., Bio., Home Sc. & Maths)	3000-4500
Lecturer-II	10 (two each for Phy., Chem., Bio., and Maths)	2000-3500
Stenographer	2	1200-2040
LDC	2	950-1500
Lab. Asstt.	4	1200-2040
Lab. Atttdt.	4	750-940
Peon	1	750-940

(ii) Department of Humanities and Social Sciences

Reader/HOD	1	3700-5700
Sr. Lecturer	6 (Pol. Sc., Eng., Hindi, His., Eco., Geo.)	3000-4500
Lecturer-II	12 (two each for above subject)	2000-3500
Stenographer	2	1200-2040
LDC	2	950-1500
Typist	2	950-1500
Peon	1	750-940

(iii) Department of Physical and Art Education

Reader/HOD	1	3700-5700
Sr. Lecturer	2	3000-4500
Lecturer-II	4	2000-3500
Stenographer	1	1200-2040
LDC	1	950-1500
Peon	1	750-940

(iv) Department of Education of Disadvantaged Group

Posts	No. of posts	Scale of pay
Reader/HOD	1	3700-5700
Sr. Lecturer	2	3000-4500
Lecturer	4	2000-3500
Stenographer	1	1200-2040
LDC	1	950-1500
Typist	1	950-1500
Peon	1	750-940

A cell for linguistic minorities is proposed to be set up to cater to the needs of teachers of Urdu, Punjabi, Tamil and Bengali languages with the following posts :

Posts	No. of posts	Scale of Pay
Reader	1	3700-5700
Sr. Lecturer	2	3000-4500
Lecturer	4	2000-3500
Clerk	2	950-1500
Peon	1	750-940

3. STRENGTHENING OF DISTRICT INSTITUTES OF EDUCATION AND TRAINING (DIETS)

The National Policy of Education 1986 laid emphasis on pre-primary Education as a feeder and support system for universalisation & elementary education. The standard of Nursery Teacher Training should also be improved to achieve this.

Presently there is only one Government TTI, in Daryaganj, New Delhi admitting fifty candidates for Nursery Teacher Training. There are however six Private Institutions. The quality of training provided in the Private Teacher Training Institute can not always be controlled and upgraded by Government.

It is, therefore, proposed to set up Nursery Teachers Training Institutes alongwith DIETs which have been established under the Centrally Sponsored Scheme of Teacher Education. These DIETs are also autonomous and are placed under the SCERT.

Under the Centrally Sponsored Scheme of Teacher Education, the State Level Empowered Committee (SLEC) set up by the Ministry of Human Resource Development, approved the establishment of four District Institutes of Education and Training (DIETS) for Delhi. On the recommendation of the State Level Empowered Committee (SLEC), M/O-HRD released non-recurring grant of Rs. 21.00 lacs for civil works and equipment for the upgradation of TTI Daryaganj into a DIET at Lawrence Road and establishment of a new DIET at Rajinder Nagar during 1987-88. Expenditure on the Lawrence Road DIET exceeded the funds released. Equipment from the T. T. I., Daryaganj could not be transferred to the new DIET at Lawrence Road due to the setting up of a Nursery Teacher Training Section at T. T. I.

A third DIET was established in 1988-89 for which a total grant of Rs. 11.90 lacs was released as non-recurring grant. Setting up of a fourth DIET for East Distt. has also been approved by SLEC. The buildings for the first three DIETs were provided by the Delhi Admn. For the fourth DIET Ministry of HRD will provide Rs. 54.00 lacs for construction of a building. The architect has, however, given an estimate of Rs. 1.48 crores.

The expenditure proposed does not cover essential items like vehicle etc.

DIETs have been conceived as centres of excellence and are expected to be models for other states. To achieve this it is essential that the State Admn. provides some financial support to the DIETs at Lawrence Road, Rajinder Nagar, Moti Bagh and Trans-Yamuna area for equipment, furniture, fixture, vehicles for principal and students as Non-recurring expenditure and recurring expenditure including Salary for the Drivers and the liability already agreed to. The likely expenditure during 8th plan period is Rs. 69 lacs. The funds may be provided as grant-in-aid to SCERT for DIETs.

4. STATE DEVELOPMENT GROUP AND EDUCATIONAL INNOVATIONS PROJECT.

National Development Group set up by Ministry of HRD for Educational Innovations in the context of APEID (Asia and the Pacific Programme of Educational Innovations for Development of UNESCO) has recommended inter-sectoral projects. The basic purpose is to promote co-ordination and inter-change among institutions/organisations undertaking innovations in different development sectors like General Education, Non-formal Education, Adult Education, Technical Education, Health and Family Education (Welfare), Agricultural Education, Rural Development and Social Welfare and to facilitate dissemination and exchange of information on educational innovations related to development. To look after this work SDG was set up but the scheme for giving financial assistance for inter sectoral innovation projects is still in the initial stages at the NDG level.

It is the responsibility of SDG to make efforts to overcome the problem. It is proposed to set up a cell/unit/section with adequate infrastructure for conducting its programmes and activities. This cell will undertake some inter-sectoral innovative projects from its own funds as decided and approved by the NDG, Executive Body. In order to achieve the goals, it is proposed to set up a cell for SDG Inter Sectoral Joint innovative projects :—

The main functions of this Cell will be :—

1. To arrange field/study visits for Orientation programme for sharing innovative ideas and experience.
2. To undertake inter-sectoral joint innovative projects after identification of priority area.
3. To procure video films of significant inter-sectoral educational innovations.
4. To prepare and develop an Inventory of significant educational innovations.
5. Publish SDG Newsletter of education innovations.
6. Arrange state level regional seminars on educational innovations for development.
7. To co-ordinate and act as a liaising agency for development of inter sectoral development projects.

The following posts are required to set up the cell :

Posts	No. of posts	Scale of pay
Reader/HOD	1	3700-5700
Sr. Lecturer	2	3000-4500
Lecturer-II	2	2000-3500
Liaison Officer/PRO	1	2000-3500
Steno	2	1200-2040
Asstt.	2	1400-2300
LDC	2	950-1500
Typist	2	950-1500
Peon	2	750-940

5. CERTIFICATE/DIPLOMA COURSE IN COMPUTER EDUCATION FOR SECONDARY SCHOOL TEACHERS

The provision of computers in schools necessitates adequately trained staff to use it. The preliminary training received by teachers to handle computers in schools is surely not enough. To see that the use of computers in schools becomes a reality, it is necessary to organise regular training programme for teachers who will be asked to handle the computers. It is proposed that SCERT institute a certificate/diploma course in computer use. The following posts are needed :—

Posts	No. of posts	Scale of pay
Reader/HOD	1	3700-5700
Sr. Lecturer	1	3000-4500
Lecturer	2	2000-3500
LDC/Typist	1	950-1500
Peon	1	750-940
Technician/Mechanic	1	1200-2040

The functions of this centre will be as under :—

1. To award certificates for Diploma/Certificate courses.
2. To develop curriculum.
3. To organise training programmes.
4. To act as a Record keeper/evaluator of the various activities of the DIET and SCERT.
5. To locate jobs for the students.

6. CENTRES FOR IN-SERVICE TEACHER EDUCATION (CIFT)

According to the Programme of Action relating to the NPE, 1986 the Delhi Admn. in its task force report has suggested in-service training of 6000 teachers for 1 day programme in each subject for teachers. This is a massive programme requiring much expertise, resources and infrastructural facilities. The two IASES at CIE

and Jamia have been set up. But it is practically impossible for the two agencies to provide 21 days in-service education programme to 6000 teachers every year. The SIE has been closed. The SCERT is being strengthened with discipline wise academic staff which will provide guidelines for In-service as well as Pre-service teacher Education. It is desirable that a single agency like Centre of In-service Teacher Education be set up devoting itself to in-service education Programme for secondary teachers. The Delhi Admn. has been approached and a complex at Vasant Vihar, is under consideration, for infrastructural facilities. The CITE needs the following resources :—

(a) Infrastructure :

A building with rooms, auditoriums labs, libraries furniture and equipments etc.

(b) Staff :

Principal — 1

(Scale 3700-5700)

20 Sr. Lecturers in Science Humanities, Arts, Physical Education. Home Sc., and SUPW and Vocational Education.

(c) 20 Lecturers and Ministerial Staff

(d) In-service Programme :

4000 teachers for 21 days Programme.

7. APPOINTMENT OF CONSULTANTS :

The SCERT and DIETS require highly trained and experienced consultants in the field of education during the formative years of their existence. Provision is made accordingly.

8. VISITS TO INSTITUTIONS OF NATIONAL AND INTERNATIONAL IMPORTANCE :

Sharing of experience is an important aspect of professional growth of the staff. Funds have, therefore, been provided for visits to institutions of national and international importance. SCERT and DIET Staff will avail of this facility.

9. LIBRARY, DISSEMINATION, DOCUMENTATION AND PUBLICATIONS WINGS :

Under this programme the following activities are proposed be taken up :—

- (1) To collect and maintain educational reports, instructions, articles, research papers and curricular and co-curricular material and other such documents from various sources.
- (2) To identify the users of educational information and to acquaint them with the service being rendered by SCERT.
- (3) To make available educational data and materials to research workers, educational planners and administrators, Educational institutions and various units of the SCERT and Director of Edu.
- (4) To act as clearing house for information required by various educational institutions and units of SCERT.
- (5) To undertake publication of materials produced by the Deptt. of SCERT.

The following posts are proposed :—

		Rs.
1. Lecturer (Editing)	2	2000-3500
2. Proof Reader	2	1640-2900
3. Peon	2	750-940

10. SETTING UP OF VIDEO PROGRAMME PRODUCTION STUDIO :

The main objective of the department of Educational Technology/Non-formal Education SCERT is to provide guidance and training to staff engaged in ET/NFE/AE Programmes and to develop human and material resources for use in such programmes. The department of ET/NFE will have the following functions :—

- (1) To develop and organise training programmes for teacher education Sts. and other functionaries engaged in the field of education technology, Non-formal Education & Adult Education.
- (2) To held and guide the district resource unit staff of DIETs/CITs in developing inputs for induction level training of instructors and supervisors of ET/NFE/AE.
- (3) To help the class room teacher in improving his competence and skills in his own field of specialisation and to provide help and guidance to the trainees of pre-service education and In-service Education in all subjects.
- (4) To develop guidance and motivating materials for promotion of the AE/NFE/programme and to provide support to the resource-cum-experimental centres of AE/NFE.
- (5) To help the DRU Staff of DIETs and the institutions engaged in ET/NFE/AE programme in developing low cost and easily available teaching materials for quality education.
- (6) To plan and conduct action Research and evaluation procedures/projects related to the ET/NFE/AE programmes in U.T. of Delhi.
- (7) To organize work pertaining to planning, preparation, utilization and evaluation of school television.
- (8) To orient class-room teachers to educational T.V. Techniques to provide help and guidance to them in school.
- (9) To prepare school television programmes in various subjects such as English, Maths, Physics, Chemistry, Biology, Geography and Science covering classes VI to XII.
- (10) To evaluate the school television Programme.
- (11) To orient class room teachers as well as presentors for making school television programmes effective.
- (12) Preparation of school television handbooks.
- (13) To prepare video cassettes on various programmes for schools and video libraries to supplement teaching in schools on commercial lines.

A proposal for an "Educational Technology Studio" from Japan as aid is under consideration in the HRD Ministry.

In the initial phase Quality video programmes will be produced as support materials to be used in various training programmes/seminars/workshops which will be organised by SCERT/DIETs/CITEs for teachers, A. E. Workers and non-formal educational staff etc.

The first phase involves expenditure for purchase of equipment, building revovation accoustics, lighting man-power, training and programme production related expenditure. These will be taken up during the first year of the 8th Five Year Plan.

In the second phase the scope of this project will be enhaced to produce video programmes in :—

- (a) Curriculam based programmes for primary, Secondary and Senior Sec. subjects for schools in Delhi. A Central video library will be installed at SCERT. Programmes will be distributed to schools to be used as actual class room support materials by school teachers, the Dte. of Education, Delhi has plans to provide VCRs/VCPs to schools. Colour T. V. sets have already been provided.
- (b) Enrichment programmes in various subjects for school students will be produced.
- (c) Teacher Training programmes will be produced in various subjects. Teachers can borrow tapes from the central library to enhance and up-date their knowledge and understanding of curriculum based subjects.
- (d) Curriculum based programmes will also be used as inputs for recordings of school TV programmes at Door Darshan Kendra, Delhi for School TV Projects.

In the third phase the programmes produced by this studio will be duplicated and commercial retail outlets will be set up to enable students to procure educational video tapes.

The likely cost for these programmes is Rs. 300 lacs. After the initial cost of hardware to be met during the first three years, only the programmes productions related expenditure will have to be incurred.

11. CAPITAL COMPONENT :

SCERT is functioning in a school building. The accommodation available is not according to the requirements of the council, SCERT should have a well desiged campus with adequate building for labs, hostel workshop, Audio-Visual Studio, Committee room, Museum, Exhibition Centre in addition to Admn. Block etc. for which land of about 50 acres is required. The work will be completed in 2-3 phases. The total cost is about Rs. 15 crore. The building is proposed to be constructed in phases.

12. PREPARATION OF COLLATERAL MATERIAL :

Enrichment material is essential for the development of creative thinking abilities among children. In the present age of rapid advancement in every field text books alone can not serve the needs of talented children.

The programme includes preparation of enrichment material for talented children. The teachers, too, will have to be provided support materials for their own enrichment in terms of creative teaching.

A sum of Rs. 243.00 lacs have been approved for the 8th Five Year Plan 1992-97 including Rs. 60.00 lacs for the Annual Plan 1992-93. To take up these programmes.

31. Opening of New Degree Colleges—(Rs. 2,000 lacs)

In pursuance of the decision taken by the Govt. of India in 1962, the Delhi Administration sponsored colleges to provide facilities for higher education to students. 15 colleges were opened in the U.T. upto 1972. Due to the rapid increase in population and the development of new colonies, the Metropolitan Council, Delhi passed a resolution to open two more colleges, one in West Delhi and the other one in Trans-Yamuna Area in 1985-86. In 1987-88 two new colleges namely, College of Physical Education and College of Business Studies were set up.

Delhi College of Arts and Commerce, is the replacement of Salwan College which was closed by the Gyan Devi Salwan Trust in phases. It had also started functioning in 1987-88. In 1989-90 the College of Applied Sciences for women started functioning.

To meet the increasing demand for degree colleges, Delhi Administration decided to open two Degree Colleges in West Delhi and Trans-Yamuna Area and the following colleges were opened in 1990-91 :—

1. Deen Dayal Upadhyaya College in Karampura, West Delhi.
2. Dr. Bhim Rao Ambedkar College in Geeta Colony, Trans-Yamuna Area.

It was also proposed to open one Teachers Training College in SCERT premises in Defence Colony in 1990-91 but this could not be done. In 1990-91, it was decided to open one more college namely Acharya Narendra Dev College at Rajokari for which syllabi was approved by the Delhi University. This College started functioning during 1991-92.

16 colleges sponsored by Delhi Administration are financed by Delhi Administration and University Grants Commission as per pattern approved by the Govt. of India on sharing basis. The share of Delhi Administration is different for different purposes i.e. 5% for maintenance charges, 25% for equipment and purchase of books and 50% for capital works and for travel grant. A part from this Administration also releases seed money for construction of staff quarters for the College employees from the grant on sharing basis. Rest of the Colleges are financed by Delhi Administration on 100% funding basis.

The Delhi Development Authority allotted land for two colleges namely Dr. Bhim Rao Ambedkar College and College of Applied Sciences for Women in Trans-Yamuna Area in 1990-91. The construction work of college buildings is get to be started. The matter of allotment of land for four colleges has been taken up with D.D.A.

It is proposed to open 10 New Degree Colleges in Delhi as detailed below during VIII Five Year Plan (1992-97) :—

West Delhi—4 Colleges—One college each in Narela, Nagloi, Najafgarh and Bodella.

Trans-Yamuna—3 Colleges—One college in Dilshad Garden and two colleges in Dallupura.

North Delhi—2 Colleges in Rohini.

South Delhi—1 College in Dwarka Colony.

Out of 10 colleges, 5 colleges shall be for General Courses and 5 shall be for specialised courses. Two colleges are proposed to be opened every year during the VIII Plan.

About Rs. 80.00 lacs shall be required per college for purchase of land and about Rs. 2.50 crores will be required for constructing a building and providing other infrastructure facilities.

In addition grant-in-aid is to be provided to these colleges during the first two years Rs. 25-30 lacs per college are proposed to be spent. In the remaining years Rs. 40-50 lacs per college will be provided depending upon introduction of courses and enrolment of students.

These 10 colleges shall be on 100% funding basis for the 8th Plan, Rs. 200 lacs has been approved which includes Rs. 350 lacs for 1992-93.

32. Scholarship to Students—(Rs. 25.00 lacs)

(i) National Scholarship : The programmes are meritorious students of CBSE and DU apply to the scholarship branch for scholarships. The cases are examined as per norms.

(ii) National Scholarship to secondary stage from talented children from rural areas : The scheme is operation since 1977-78. It aims at developing education in the Rural Areas of Delhi. Scholarship is awarded to such meritorious students who come in the selection zone on the basis of the open Merit competition. The eligibility conditions are that the scholar must have secured a minimum of 60% marks in the VIII class. Once this scholarship is awarded the same is renewed upto the completion of class XII of the school subject to his/her promotion. The awards are allotted block-wise. There are 30 scholarship @Rs. 300/- for class IX and X and Rs. 600/- for class XI and XII per annum. It has been decided to raise the scholarship from Rs. 300 to Rs. 500 for class IX and X and from Rs. 600/- to 1000/- for classes XI and XII.

(iii) Sanskrit Scholarship : The scholarships are awarded on the basis of a competitive examination conducted by the scholarship branch and scholarships, once awarded, are continued from year to year subject to progress. This is tenable upto XII commencing from IX class @Rs. 120/- per year. The scholarship is proposed to be raised to Rs. 500/- for class IX and X and to Rs. 1000/- for class XI and XII.

(iv) Open Merit (Senior) Scholarship : This scholarship is given to those students who have secured 65% and above marks in VIII class and passed competitive examination on Merit. The scholarship is given to 50 students @ Rs. 100/- per year for two years renewed year to year upto XII class. It is proposed to raise the scholarship to Rs. 1000/- for class IX and XII.

(v) Open Merit (Junior) Scholarship : This scholarship is given to those students who have secured more than 75% Marks in class V and come on the merit through a competitive examination. The number of scholarship are 100 @ Rs. 50/- per year and is continued upto VIII class. It is also proposed to raise the scholarship to Rs. 500/- for class VI, VII, VIII.

Rs. 25.00 lacs has been approved for the 8th Five Year Plan 1992-97 including Rs. 7.00 lacs for Annual Plan 1992-93.

33. Merit Scholarship to SC/ST students including educationally backward class—(Rs. 50 lacs)

The scheme was originally introduced from 1981 on the pattern of the scheme under operation in the Harijan Welfare Board which has been sanctioning the stipends to the SC/ST students of Delhi studying from class IX onwards. The Directorate of Edu. Started this scheme for the students of class VI to VIII on the basis of their performance in previous classes. The marks was 55% in class V. The rates of scholarship are as under :—

VI	Rs. 120/- per year
VII	Rs. 180/- do
VIII	Rs. 240/- do

On account of the tremendous increase in prices and cost of living it is now proposed to raise the scholarship as under :—

Class VI	Rs. 300/- per year
Class VII	Rs. 600/- do
Class VIII	Rs. 900/- do

A sum of Rs. 50.00 lacs has been approved for the 8th Five Year Plan 1992-97 including Rs. 10.00 lacs for the Annual Plan 1992-93.

34. Open Merit Scholarship to SC/ST students—(Rs. 6.00 lacs)

This scheme was introduced in 1981-82. The selection is made after the competitive exam. of the SC/ST students who passed with atleast 60% marks in V class. 100 seats are awarded each year. The awards are renewed for class VII and VIII subject to performance. The rate of scholarship is Rs. 500/- per year. It is now proposed to raise the scholarship to Rs. 1000/- for class VI, VII and VIII.

Rs. 6.00 lacs has been approved for the 8th Five Year Plan 1992-97 including Rs. 0.50 lac for Annual Plan 1992-93.

35. Remedial Coaching/Teaching Facilities for SC/ST students—(Rs. 16.00 lacs)

The main objective of this continuing scheme is to establish remedial coaching centres for SC/ST students in all the schools with the aim of ensuring better results in Secondary and Sr. Sec. level and to bring them at par with the general students by way of providing them coaching facilities. The rate of honorarium fixed by Govt. of India is as under :—

Principal	Rs. 150/- P.M.
Teacher	Rs. 100/- P.M.
Class IV	Rs. 30/- P.M.

Rs. 16.00 lacs has been approved for the 8th Five Year Plan 1992-97 including Rs. 1.00 lac for Annual Plan 1992-93.

36. *National Integration Cell*—(Rs. 35.00 lacs)

Objectives :

1. Exposing the students and teachers to be cultural diversity of India so that our rich cultural heritage may be preserved.
2. Development of National Cultural Programme to foster social equality, solidarity and pride in our heritage.
3. Preparing the young for new social challenges.
4. Puppet shows, Dramas, folk dances, debates, extempore speech, Moshaira, Kavi Darbars for promotion of National Integration.
5. Promotion of mass community singing programme, cultural goodwill tours and exchange programmes for promotion of better understanding.
6. Teachers training Programme to equip them to take up new challenges effectively.
7. Creation of regional training centres for speedy implementation of programmes.

The scheme is given top-priority by Govt. of India.

The following programmes are proposed to be taken up during the Annual Plan 1992-93 and the 8th Plan period :—

1. Trs. community singing in 2 groups Music & Non-Music Teachers 700 each.
2. Purchase of Musical instruments for schools.
3. Cultural Exchange.
4. Inter zone Cultural Competition in Folk Dances/Singing Drama.
5. National Integration and JRC Camp.
6. Welcome/Reception to VIP/VVIP, Foreign guests and other unforeseen items.
7. Setting up of Cultural Centres in each Distt.
8. Purchase of Furniture/Electronic equipment/Music equipment.

9. TRANSPORTATION :

It is proposed to purchase a jeep in the 8th Plan to provide adequate mobility to the officers who implement the programme under the scheme.

Under the scheme, the following posts are proposed to be created during 8th Plan/Annual Plan 1992-93.

S. No.	Post	No. of posts	Scale of pay
1.	D. D. E.	1	3500-4500
2.	A. D. E.	1	3000-4500
3.	D. E. O.	1	3000-4500

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4. Supervisors	5	2000-3500
5. Choreographers	2	1640-2900
6. P. T. G.		
7. H. C.	5	1400-2300
8. U. D. C.	5	1200-2040
9. L. D. C.	10	950-1500
10. Class-IV	5	750-940
11. Music/Dance Teachers	2	1400-2600
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A sum of Rs. 35.00 lacs has been approved for the 8th Plan 1992-97 including Rs. 28.40 lacs for 1992-93.

Provision for salary of the posts to be created, telephone expenses, maintenance of vehicles and other miscellaneous expenditure etc. is included in the proposal.

37. *Electronic Data Processing Unit (EDP Unit)*—(Rs. 30.00 lacs)

This is an ongoing scheme catering to about 50,000 employees. This number is increasing every year with the opening, upgrading and bifurcation of schools. It is also proposed to computerise statistical data which is presently compiled manually. The CMC was entrusted with the task of carrying out the following functions :—

1. System design and development with documentation.
2. System check out.
3. One time creation of master file including their data entry, printing of check list etc. for 25,000 teachers.
4. Creation of school master file with one correction cycle.

The Deptt. had initially proposed creation of the following posts.

1. Programmer	2	Rs. 2200-4000
2. Asstt. Programmer	2	„ 1640-2900
3. Data entry/Machine Operator	5	„ 1200-2040
4. L. D. C.	1	„ 950-1500
5. Manual Attendant	1	„ 750-940
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One post of Asstt. Programmer was created during 1988-89. About 22,000 PIS from validation check lists received from CMC are being scrutinised and will require computerisation.

Time and again, it has been stressed in various conferences of Ministries and Education Secretaries that there should be some effective machinery at the H.Q. to monitor the progress made under various schemes. Accordingly, it is proposed to strengthen the existing E. D. P. Units at the H.Q. during the 8th Plan 1992-97. Ten more posts which could be used in a 'U' 'stand alone' position or with a terminal when

the same is provided by the state level computer (NIC) are proposed to be created. These will be compatible with ND 550 Computers one Gypsy Jeep will also be purchased for effective implementation for the scheme during 1992-93. Besides, the following staff are required under the scheme :—

1. Asstt. Director of Edu.	1
2. Programmer	1
3. Asstt. Programmer	2
4. Research Officer	1
5. Stat. Asstt.	2
6. Key Punch Operator	10
7. Stenographer	2
8. L. D. C.	2
9. Driver	1
10. Machines Attendant/Peon/Sweeper	5
	27

Rs. 30.00 lacs has been approved for 8th Plan 1992-97 including Rs. 4.00 lacs for Annual Plan 1992-93.

38. *Plan Monitoring and Evaluation Cell—(Rs. 5.00 lacs)*

The education system in Delhi has expanded considerably. There are 1662 schools and about 18.00 lacs students. This has significant implications for the management of the system. The POA (NPE-1986) states :—

“In the present context it is envisaged that a Management Information System (MIS) will be evolved for monitoring all programmes. Information will be collected, compiled, analysed and acted upon at the block/local authority level. The flow of information to different levels (Distt./State/Centre) will be so planned that controlled functions at these levels can be performed effectively without delay. Accordingly, management information system will ensure periodic flow of information for improvement in management. Measures will be taken towards careful analysis of the information”.

The basic purpose of monitoring is to take timely preventive and corrective actions for shortcomings noticed in the implementation of projects programmes. The monitoring process involves the following 3 steps :—

1. Observation of facts relating to the work.
2. Reporting of exceptions where actual performance deviates from expected performance.
3. Feed back in the form of decisions/actions to the concerned functionaries.

Now the deptt. proposes to introduce a management, information system to cater to the requirement of the entire education system. It will have to be developed in such a way so as to deliver the necessary information for Planning, Monitoring and Evaluation and Management Control. This calls for greater coordination between different branches of the education department so that a comprehensive data base may be developed.

Accordingly, it is proposed to strengthen the existing Plan Evaluation Cell at the Head Quarter and redesignate it as a 'Plan Monitoring and Evaluation Cell at the Headquarter' which would serve the Deptt. from all angles. The new arrangement will provide regular and timely flow of information and will enable the deptt. to initiate remedial and corrective measures to make the plan schemes being implemented by the Dte. more result oriented.

In view of the above the following posts are proposed to be created :

S. No.	Name of the Post	No. of Posts	Pay-Scale
1.	Dy. Director of Edn. (Planning)	1	3000-5000
2.	Asstt. Director of Edn. (Plg.)	1	2200-4000
3.	Stat. Officer	2	2000-3500
4.	Reserch Officer	2	1640-2900
5.	Stat. Asstt.	7	1400-2300
6.	Stat. Investigator	7	1200-2040
7.	U. D. C.	2	1200-2040
8.	Steno	2	1200-2040
9.	L. D. C.	2	950-1500
10.	Driver	2	950-1500
11.	Class-IV	2	750-940
		30	

One Gypsy and one Motor Cycle is also proposed to be purchased under this scheme so as to enable the officers to contact various agencies and have liaison with them. The existing post of Plan Evaluation Officer will be upgraded to that of Asstt. Director of Education and that of Statistical Asstt. and L.D.C. will be merged under this scheme.

A sum of Rs. 5.00 lacs has been approved for the 8th Plan 1992-97 including Rs. 4.00 lacs for the Annual Plan 1992-93.

39. *Grant-in-Aid to Voluntary and Cultural Organisations—(Rs. 10.00 lacs)*

The main objective of this containing scheme is to provide grant-in-aid to such Voluntary and Cultural Organisations/Institutions which are registered under the Societies Registration Act 1860, operate in Delhi and are engaged in educational and cultural activities for a minimum period of three years period to the request for grant-in-aid.

As per the latest guide lines of the Govt. of India, Ministry of Human Resource Development (Deptt. of Education) the grant-in-aid shall be assessed periodically or annually at the discretion of Delhi Administration and shall be an amount not exceeding 50% of the amount of the total expenditure assessed by the department on the basis of the latest audited statement of accounts and the budget estimates furnished by the Institutions/Organisations subject to a maximum of Rs. 50,000/- per annum.

The amount of subscriptions including any other misc. receipts, donations, if any received by organisation is subject to the condition that grant shall be so regulated that the quantum of grant plus such income received by an Organisation/Institution should not exceed the total expenditure.

The donations received by an Organisations/Institutions specifically for construction of building or addition to the existing building shall not count towards income of the Institutions/Organisation. However, no grant is admissible for construction of buildings.

During the years 1989-90 and 1990-91 grant-in.aid to the extent of Rs. 31,000/- & 1,00,000/- was released to 4 Institutions and 5 Organisations respectively.

A sum of Rs. 10 lacs is approved for the 8th Plan 1992-97 including Rs. 2.00 lacs for the Annual Plan—1992-93.

40. *Examination Branch—(Rs. 20 lacs)*

There is no examination branch at Head Quarters at present. Accordingly it is proposed to set up a separate examination Branch to conduct the following examinations :—

1. N. T. T. Exam.	Two Years Course
2. J. B. T. Exam.	do
3. E. T. E. Exam.	do
4. Teachers Recruitment test	—

The examination Branch will also prepare sample papers for class VI to IX & X, XII, because changes occur in syllabus and the examination pattern. The Examination Branch will also do liaison work with the concerned authorities i.e. CBSE, NCERT, SCERT etc. Three jeeps are also proposed to be purchased under the scheme.

The following posts are proposed to be created during the year 1992-93 to implement the scheme :—

1. Controller of Exam. (Sr. DANI Scale)	1
2. Jt. Controller of Exam.	1
3. D.D.E. (Exam.)	1
4. A.D.E. (Exam.)	1
5. Superintendent	1
6. Head Clerk	1
7. St. Asstt.	1
8. U.D.C.	3
9. L.D.C.	4
10. Steno (2 Sr., 2 Jr.)	4
11. Class-IV	6
12. Driver	3

An amount of Rs. 20.00 lacs has been approved for 8th Plan 1992-97 including Rs. 4.00 lacs for Annual Plan—1992-93.

41. *Conversion of Sec./Sr. Sec. Schools into composite Schools from Pre-primary to XII—(Rs. 300.00 lacs)*

There are about 1662 Sec., Sr. Sec. and Upper Primary/Middle Schools. The enrolment at Sec. level is 2.18 lacs and Sr. Sec. level 6.00 lacs. Middle/Sec./Sr. Sec. Schools will be set up under the Plan Scheme for Opening New Schools.

Sec. and Sr. Sec. Education is a terminal for those who enter the world of work. For such students vocationalisation needs to be strengthened. For the rest it is preparatory to higher education. A flexible and interactive teaching programme supplemented by adequate libraries and laboratory facilities is a must for a learning-oriented education. Programme of consolidation will be provided under the Plan Scheme.

The policy relating to Sec. Education implies :—

- (i) Programme to ensure access to Sec. Edu. being widened to cover unserved areas.
- (ii) Programme of consolidation in other schools.
- (iii) Programme of setting up pace-setting schools.

As far programme of pace-setting schools is concerned, NPE, 1986, has emphasised that children with special talent or aptitudes should be provided opportunities to proceed at a faster pace by making good quality education available to them irrespective of their capacity to pay for it.

Pace-setting school intended to serve this purpose will be established in various parts of Delhi on a given pattern, but with full scope for innovation and experimentation. The Deptt. has a few Model School from classes 1st to 12th. The quality of education and the results of these school are much better and are in great demand. These schools are not in a position to meet the growing public demand for admission in these schools. The then L.G. publically announced that composite schools i.e. from class I to XII in all the 28 educational zones will be converted into composite schools by adding pre-primary i.e. to V classes and strengthening the existing infrastructure etc. In the 8th Plan period 50% of the Sec. and Sr. Sec. Schools in each education zone will be converted into composite schools to benefit all students irrespective of caste creed, location or sex to have access to education of a comparable quality.

Pre-primary education will be fully integrated both as a feeder and a strengthening factor for primary education and a human resource development in general.

It will be included only in those schools where separate accommodation is available.

Out of 72 existing composite schools, 15 schools will be covered every year for adding pre-primary classes. All the Sec./Sr. Sec. Schools will be converted into Composite schools starting from pre-primary in phased manner.

It is proposed to cover 550 Sec./Sr. Sec. Schools into composite schools during the 8th Plan in phases. in the following manner :—

1992-97	1992-93	1993-94	1994-95	1995-96	1996-97
550	120	100	105	110	115

It is proposed to create one post each of Asstt. Teacher, Hobby Teacher in these schools which will increase every year with the increase in number of sections. The details of these posts are as under :—

1992-97	1992-93	1993-94	1994-95	1995-96	1996-97
2985	240	440	545	765	995

Apart from teacher and related staff other items like furniture, equipment etc would also be required for smooth and effective running of these schools.

A sum of Rs. 300.00 lacs is approved for the 8th Plan 1992-97 including Rs 70.00 lacs for Annual Plan 1992-93.

42. Specialised Coaching Facilities to Talented Students including Girls SC/ST and Educationally Backward Communities for Competitive Examinations—(Rs. 75.00 lacs)

The national policy on education, 1986 laid special emphasis on promoting national progress, sense of common citizenship and culture. It also laid stress on the need for a radical reconstruction of the educational system to improve its quality at all stages and given greater attention to science and technology. Although education is important at all stages Sec. Education is the key stage, for various reasons. It builds upon elementary education and provides preparation for higher and professional education. Accordingly, the quality of Sec. Education assumes an important role. It has been observed that students belonging to J.J. Colonies, Socio-economically backward areas, slum areas etc., who get good marks in the Sec. exams. do not get opportunities to rise in their life in comparison to students of public schools.

To prepare them to complete in competitive exams. for admissions in professional disciplines likes Medical, C.A./I.C.W.A., Engineering, it is proposed to cover one boys and one girls school from each of the 28 zones during 1992-97. They will be provided specialised coaching facilities for talented students to prepare them for competitive exams. Male students who get 70% marks, female students who get 65% or more marks, SC/ST male students who get 60% or more marks and SC/ST girl students who get 55% or more marks in the concerned discipline will be eligible for admission in the classes to be started for the purpose. Lecturers from Delhi University or institutions where these courses are run, will be invited to deliver lectures to the students under this scheme. The classes will be held during summer vacations and on holidays round the year. The lecturers will be paid @ Rs. 150/- per lecturer. During the 8th Plan 1992-97 it is proposed to cover 98 Schools in a phased manner.

A sum of Rs. 75.00 lacs has been approved for 8th Plan 1992-97 including Rs. 20.00 lacs for the Annual Plan 1992-93 to implement the scheme.

43. Improvement of Education in Rural Areas—(Rs. 50.00 lacs)

The scheme aims at providing better educational facilities in the rural areas and improving the results at board examinations of Rural schools. Schools which do not have adequate schooling facilities like library, lab, games equipments, science lab. equipment, staff etc. will be identified. Such schools will have to be strengthened from the point of view of teaching facilities and measures will have to be taken to ensure that teachers of repute are posted in such schools. Since the Department cannot bind and one to serve in a particular area against his wish, some sort of additional incentive will have to be given in the form of rural areas allowance so as to attract teachers of repute to work in schools in rural areas.

It is, therefore, proposed to introduced a Rural Area Allowance under this scheme for such teaching and non-teaching personnel who volunteer for posting in rural areas in the following manner :—

1. Head of Institution	Rs. 500/- p.m.
2. PGI/Supdt.	Rs. 400/- p.m.
3. TGT/H.M./H.C./L.T. and other parallel posts	Rs. 300/- p.m.
4. Lab. Asstt./UDC or equivalent posts (including LDCs)	Rs. 200/- p.m.
5. Class IV or equivalent posts	Rs. 100/- p.m.

Two boys and two girls schools from each district will be taken up in the year 1992-93 & in all 80 schools will be covered during the 8th Plan period for which a sum of Rs. 10.00 lacs will be required for 1992-93 and Rs. 50.00 lacs for the 8th Plan. Residential accommodation will be provided in rural schools to atleast 10% to 20% of the staff. The following Residential Quarters are proposed to be constructed during 1992-93.

1. Principal/Vice Principal	1	Type IV/V	Rs. 3.00 lacs
2. Teachers	3	Type III	Rs. 5.00 lacs
3. Class IV	2	Type II	Rs. 2.00 lacs
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As sum of Rs. 50.00 lacs has been approved for the 8th Five Year Plan 1992-97 including Rs. 10.00 lacs for the Annual Plan 1992-93.

44. "Setting up of a 'B' type Departmental Canteen"—(Rs. 30.00 lacs)

At present, there is no canteen at the Head-quarters of the Directorate of Education. Apart from the staff posted at the Headquarter, about 1000-2000 teaching and non-teaching personnel visit the Headquarter daily in connection with official work. It has therefore, been decided to establish a 'B' type departmental canteen at the Headquarter under the Directorate of Education. This is in accordance with instructions contained in the Govt. of India Ministry of Home Affairs, New Delhi M. No. 6(2)/12-77. All the canteens in Govt. offices are to be run either departmentally or by the Co-op. Societies. The high power committee on canteens set up by the Govt. has strongly recommended that private contractors should not be allowed to run a canteen in any Govt. office and wherever such an arrangement exists the contracts should be terminated forthwith and efforts should be made to run the canteen departmentally by the offices concerned.

Construction of the canteen building has been completed. Staff equipment, cookery/utensils, furniture, material for preparation etc. are needed.

The following staff is needed which is as per the norms set by Administrative instructions on Departmental canteens in Govt. Offices, 2nd Edition 1988 :—

Sl. No.	Category of Posts	No. of posts	Scale of pay
			Rs.
1.	Manager	1	1200-1800
2.	Asstt. Manager	1	950-1500
3.	Halwai	1	950-1500
4.	Counter Clerk	1	825-1200
5.	Coupen Clerk	1	
6.	Cook	1	
7.	Tea Maker	1	750-940
8.	Bearer	5	
9.	Wash boy	2	
10.	Sweeper	1	

The following grant in the form of Departmental Assistance, in terms of para 3.1 of the instructions on canteens is admissible besides 70% of the wages :

Type of Canteen	For equipment	Amount of grant authorised for crockery, for furniture & utensils		Total
'B' type Canteen				
B-type	Rs. 19,200	Rs. 4,800	Rs. 8,000	Rs. 32,000

In accordance with para 3.7 uniforms will also have to be provided to the staff other than Manager, Asstt. Manager, Counter Clerk and Coupen Clerk and the amount of subsidy on this account comes to Rs. 2,000 per annum. The uniforms will be provided in accordance with Annexure-II read with para 3.7 of the above instructions. Since the canteen is proposed to be set up on a departmental basis, Rs. 50,000/- will be provide for purchases in the form of an interest free loan, which will be recovered in phases. The departmental canteen will be managed by a Managing Committee, in the light of instructions contained in the Ministry of Home Affairs, OM No. F. 7/1/62-W. II dated 28-12-62, consisting of a representative of the Director at Headquarters and the employees. The managing committee need not be registered but it should be so constituted as to assume full responsibility for efficient running of the canteen as also for the losses etc. This should be presided over by the Head of Deptt. or his nominee. The Welfare Officer of the Deptt. will be closely associated with the working of the canteen and made principally responsible for its functioning. The managing committee should have 5 to 7 members including one lady from the staff.

A sum of Rs. 30.00 lacs has been approved for the 8th Five Year Plan 1992-97 including Rs. 10.00 lacs for the Annual Plan 1992-93.

NEW SCHEMES

45. "Grant-in-Aid" to the Society of National Museum Institute of the History of Art Conservation and Museology Delhi—(Rs. 5.00 lacs)

The society of the National Museum Institute of the History of Art, Conservation and Museology, Delhi, has been set up with Minister-incharge of Education and

Culture, Govt. of India, as its Chairman, the Director General of the National Museum as its Vice-Chairman and the Society has been accorded the status of a "Deemed University". The main objectives of the society are to provide for various courses of study, training and research in different branches of the history of Art, Museology, Primitive art, archival studies and conservation of cultural property and the like and to provide and offer facilities for fundamental research in Art, museology, conservation of cultural property, archaeology and archival studies and the like.

2. The National Museum Institute of the History of Art, Conservation and Museology, Delhi, has proposed the setting up of two chairs in the name of the Lt. Governor, Delhi for conducting research and study in the Art and Architecture of Delhi and conservation and restoration of works of Art, especially oil paintings.

- (i) Lt. Governor, Chair for the Study of Art and Architecture of Delhi and their Sources; and
- (ii) Lt. Governor, Chair for the Conservation and Restoration of Works of Art, Specially Oil Paintings.

3. Provisions for salary of two full Professors amounting to Rs. one lac per year for each Professor and for subsequent increases in pay are to be made. The appointment of Professors for these two posts shall be made as per qualifications prescribed by the University Grants Commission and as per the rules of the Institute.

NEED/JUSTIFICATION OF THE SCHEME

For centuries, Delhi has been the Capital of India. Archaeological excavations at Purana Qila have unearthed settlements, dating anterior to the Christian era. There had been several Dynasties of the Rajputs, Sultanate and Mughal period. During their rule some of the greatest monuments of art and architecture like the Iron Pillar of the Gupta period, Mehrauli, Qutab Minar, Old Forts, Humayun's Tomb, Jama Masjid and Red Fort etc., had been checked. In addition, Delhi has also made a significant contribution to Decorative Arts, including ivory carving and marble inlay, etc.

4. The setting up of a Chair in the name of Lt. Governor Delhi, in this academic field, would help in achieving a lot to glorify the accomplishments of Delhi.

5. Whereas, of late, conservation of monuments has received some attention, restoration of works of art, specially oil paintings have not yet taken off. There are hardly a dozen restorers of oil paintings in the country. This project was first started at the National Gallery of Modern Art, which was later shifted to the National Museum. Since then it has been continuing and the National Museum has been rendering services to the Asiatic Society, Calcutta, Victoria Memorial Museum, Calcutta, Rashtrapati Bhavan, New Delhi and various Raj Niwas, etc. which own important and historical oil paintings.

The Administration has decided to set up two chairs as proposed above. The setting up of the two chairs will put Delhi on the oil painting map. The total amount

proposed to be given for the purpose is Rs. 30 lacs. Grant-in-aid will be made @ Rs. 2 lacs per year for the first 5 years. After this, Grant-in-aid will be released either @ Rs. 2 lacs per year or the entire balance amount will be released in one or two strokes to create a corpus for future continuation of the Chairs which will be decided after the evaluation of the scheme.

A sum of Rs. 5.00 lacs has been approved for the 8th Five Years Plan 1992-97 including Rs. 2.00 lacs for the Annual Plan 1992-93 under the scheme.

46. *Coaching/Remedial facilities for students belonging to Educationally backward classes—(Rs. 5.00 lacs)*

The educationally backward classes are to be given special relief to improve their socio-economic condition in the society. Educationally backward classes covers Neo-Budhists and Muslims. The population of Neo-Budhists is negligible in Delhi while the population of Muslims is much more in Delhi and they are educationally backward.

The scheme will provide for special coaching to the students studying in class IV onwards. Coaching/Remedial teaching class in each school will be conducted. In case the number of students in one school is insufficient students of nearby schools will be clubbed together.

A Special class for such students who belong to the educationally backward classes will be conducted before or after school hours, from the month of September to February. Subject i.e. English, Maths, and Science is to be taught for two days in a week. The following staff will be engaged and will be entitled for honorarium mentioned against each :—

	Rs. P. M.
1. Principal	250
2. Teacher (Maths)	150
3. Teachers (English)	150
4. Teacher (Science)	150
5. Class IV	75

A sum of Rs. 5.00 lacs is approved for the 8th Five Year Plan 1992-97 including Rs. 1.00 lac for the Annual Plan 1992-93.

47. *Assistance to students studying in Madras—(Rs. 25.00 lacs.)*

Special attention is, to be given to educationally backward classes to bring them at par with others.

It is seen that the Moulvees generally apprise the students of religious matters. Knowledge of General Science, Maths and English are new things for these students. They cannot enter the National Stream by competing in the general examination.

It has become necessary to teach them Science, Maths and English.

It is, therefore proposed to appoint one Part-time Teacher in each subject, i.e. General Science, Maths and English, who will cover three Madrassas, and will be paid Rs. 800/- p.m. Besides this, a sum of Rs. 50/- per month will be given for purchase of books, note-books, stationery etc. to those students who will opt to obtain/gain such elementary education by attending such special classes.

The Deputy Director of Education of the concerned Distt. will make proper supervision in consultation with the Urdu Academy in respect of the implementation of this scheme. At present there are approximately 320 Madrassas in Delhi which are proposed to be covered in a phased manner as mentioned below :—

92-97	92-93	93-94	94-95	95-96	96-97
320	45	55	65	75	80

It is proposed that this scheme will continue till such time, the Government of India introduces a Centrally Sponsored Scheme.

A sum of Rs. 25.00 lacs is approved for this new scheme for the 8th Five Year Plan 1992-97 including Rs. 4.00 lacs for the Annual Plan 1992-93.

II—MUNICIPAL CORPORATION OF DELHI

1. *Expansion and Improvement of Pre-Primary Education Age Group 3-5 years—* (Rs. 425 lacs)

The Scheme aims at providing a suitable environment to the above said age group of children for proper growth and to reduce wastage and stagnation at the primary level. Provision of Nursery School facilities serves a useful purpose in preparing children for formal education, specially so for children coming from Homes in distress.

Nursery classes are functioning in 754 primary schools with an enrolment of about 48,000 children.

The posts created during 1990-91 and 1991-92 are to be continued. No expansion will be undertaken.

Physical Targets

During the 8th Plan, the following attached classes and additional sections, created in 1990-92, will be continued :—

	1990-92
(a) No. of new Nry. Classes/Sections	180
(b) Posts of Nry. Teachers created	180
(c) Posts of Nry. Ayas created	74
(d) No. of additional children to be covered	6300

An outlay of Rs. 425 lacs (Rs. 415 lacs for recurring and Rs. 10 lacs for Non-recurring) is approved for the 8th Five Year Plan including Rs. 75 lacs (Rs. 73 lacs recurring & Rs. 2 lacs Non-recurring) for the Annual Plan 1992-93.

2. *Expansion of Primary Education in the age group of 6-11 years—*(Rs. 7295 lacs)

The Scheme aims at universalisation of Primary Education in the age group of 6-11 years in the MCD area.

Providing primary schooling facilities is an obligatory function of the Corporation. Under the Scheme, it is necessary to extend primary educational facilities to every child in the age group of 6-11 years. The Corporation has opened primary schools in its area in such a way that every eligible child can seek admission in a school within walking distance at his residence. 1674 Corporation Primary Schools are there with a total enrolment of 8,31,616 out of which 2,12,692 belong to Scheduled Castes. These schools cover rural, slum areas, J.J. clusters, re-settlement colonies and other colonies developed by the DDA and Delhi Administration.

The following table indicates the number of posts created during 1990-92 and additional posts required for additional enrolment of children in each year of the 8th Five Year Plan. The posts created during 1990-92 will be continued :—

Posts created/to be created	1990-92	1992-93	1993-94	1994-95	1995-96	1996-97
(i) H.Ms.	87	40	40	40	40	40
(ii) A/Trs.	1800	700	750	750	750	750
(iii) Class-IV	203	120	120	120	120	120

Apart from creation of posts funds will also be required for school contingencies, equipment, furniture, hiring of tents.

Physical Targets

	1990-92	1992-97	1992-93
(a) No. of Schools to be opened/bifurcated	87	200	40
(b) No. of additional children to be covered	73,600	1,50,000	30,000
(c) Posts of H. Ms. required	87	200	40
(d) Posts of Pry. Trs. required	1,800	3,700	700
(e) Posts of Class-IV required	203	600	120

Financial Outlays (Rs. in lacs)

(a) Recurring	6895.00	810.00
(b) Non-recurring	400.00	70.00
	<u>7295.00</u>	<u>880.00</u>

The approved outlay for the scheme in the 8th Five Year Plan is Rs. 7295 lacs (Rs. 6895 lacs for recurring exp. and Rs. 400 lacs for Non-recurring) and the Annual Plan 1992-93 provision is Rs. 880 lacs (Rs. 810 lacs for recurring exp. and Rs. 70 lacs for Non-recurring exp.

3. Improvement of Primary Education—(Rs. 125 lacs)

Objective :

To attain qualitative improvement in Educational Standards.

In the Corporation area, the pressure of expansion in the field of primary education has been intense during the past 34 years. It is necessary to pay proper attention to qualitative improvement also.

Two In-service Training Institutes are being run by M.C.D. at Shakti Nagar and Ahata Thakur Dass for carrying out an In-service Training Programme for Teachers, research and extension work in the field of primary, pre-primary & physical education.

During the VIII Five Year Plan, the following measures will be adopted to improve the quality of Education :

1. In-service Training Programmes of Teachers.
2. Expansion of Library facilities.
3. Publication of Educational and Instructional Material.
4. Distribution of Zonal, Cash and Municipal Awards to outstanding teachers.
5. Introduction of socially useful productive work in the schools.

To implement the scheme an outlay of Rs. 125 lacs for the 8th Five Year Plan is approved including Rs. 25 lacs in the Annual Plan 1992-93.

4. Improvement of Science Teaching—(Rs. 125 lacs)

Objectives

1. To organise In-service Training Programme for teachers in Science, Mathematics and Educational Technology.
2. To organise camps for talented children who secured Science Talent Scholarships.
3. To arrange tours for children and teachers to visit places of scientific interest in Delhi.
4. To show scientific films in schools.
5. To organise science fair, exhibition and publications.
6. To enrich and make educational use of C.R.C. (Museum).
7. Maintenance of Colour T.V. Sets provided in M.C. Primary Schools.
8. To provide enrichment activities in Science and Mathematics.

There are six science centres being run by M.C.D. where training programmes are arranged.

Science Talent Scholarships will be awarded to meritorious children.

Science equipment will be provided in schools and science centres.

One post of Driver and one post of Cleaner created during 1990-92 will be continued during 1992-97. One post of AEO(SC.) created in 1991-92 will also be continued.

Details of creation of new posts :

		1992-97	1992-93
(a) A.E.O. (Science)	(3000-4500)	1	1
(b) Curator for CRC	(3000-4500)	1	1
(c) TV Engineer	(2000-3500)	1	1
(d) TV Mechanic	(1200-2040)	1	1
(e) U.D.C.	(1200-2040)	1	1
(f) Driver Bus	(1200-2040)	1	1
(g) Cleaner	(750-940)	1	1

The approved outlay for the scheme in the 8th Five Year Plan is Rs. 125 lacs (Rs. 10 lacs recurring exp. and Rs. 115 lacs non-recurring). For the Annual Plan 1992-93 the approved outlay is Rs. 25 lacs.

5. Welfare Schemes—(Rs. 2010 lacs)

Objectives

Providing of various incentives to achieve the goal of Universalisation of Primary Education, reducing drop outs at the primary level of Education and maintaining better up keep of children admitted in schools.

For the success of Universalisation of Primary Education and to cover the maximum number of children, it is necessary to provide various incentives in the form of text books (to all children), free uniforms, free spectacles, educational tours, Scholarships, etc.

These incentives will continue to be provided during the 8th Five Year Plan specially, for the children of rural areas, re-settlement colonies, slum areas and weaker & backward sections of society.

An amount of Rs. 2010.00 lacs is approved for the scheme during the 8th Plan period.

Physical Targets

(children to be covered)	1992-97	1992-93
(a) Text Books (in lacs)	41.00	7.60
(b) Uniforms (in lacs)	15.00	3.00
(c) Tours (in lacs)	7.00	1.40
(d) Spectacles	20,000	4,000
(e) Merit Scholarships		
(i) Examinees	2,25,000	50,000
(ii) Scholarships	25,000	5,000

Details of Financial Outlays

	(Rs. in lacs)	
(a) Text Books	1200.00	220.00
(b) Uniforms	710.00	110.00
(c) Tours	30.00	6.00
(d) Spectacles	10.00	2.00
(e) Merit Scholarships	60.00	12.00
Total :	<u>2010.00</u>	<u>350.00</u>

6. Strengthening of Establishment & Inspectorate Staff—(Rs. 120 lacs)

Objectives

Creation and upgradation of administrative posts to increase the efficiency of supervisory and administrative control over schools run by M.C.D.

Consequent upon the increase in number of primary schools during the 7th Five Year Plan and taking into consideration the expansion during the 8th Five Year Plan, it is necessary to make corresponding increases in the Administrative, Supervisory,

Ministerial and Non-Ministerial staff in the Education Department. Accordingly the following posts are proposed to be created :—

Posts	1992-97	1992-93
(1) D.E.O. (3000-5000)	1	1
(2) A.E.O. (3000-4500)	1	1
(3) S. I. (General) (2000-3500)	10	10
(4) Superintendents (1640-2900)	1	1
(5) Head Clerk (1400-2300)	1	1
(6) Jr. Steno (1640-2900)	1	1
(7) Att. Officers (1400-2600/1640-2900)	1	1
(8) Steno-Typist (1200-2040)	1	1
(9) U.D.C. (1200-2040)	1	1
(10) L.D.C. (950-1500)	2	2
(11) Att. Helpers (950-1500)	1	1
(12) Peon (750-940)	3	3

The posts created during 1990-92 will be continued.

Financial Outlays approved

(Rs. in lacs)

(a) Recurring	105.00	18.00
(b) Non-Recurring	15.00	2.00
Total :	125.00	20.00

7. Capital Works Programme—(Rs. 9000 lacs)

About 1000 classes/sections are housed in tented accommodation. About 750 classes/sections are likely to be opened during each year of 8th Plan. Thus rooms are required for replacement of tents, new expansion and conversion of prefab by pucca rooms. Additional facilities e.g. deep bore hand pumps, tube wells, development of play grounds, etc. are to be provided.

Physical Targets

	1992-97	Financial Outlays
		(Rs. in lacs)
(a) Rooms	3200	7250.00
(b) Pre-fabricated	600	450.00
(c) Boundary Walls	166	125.00
(d) Lavatory Blocks	250	75.00
(e) Staff Quarters	400	600.00
(f) General improvement (Add. facilities)		500.00
Total :		9000.00

The details of 'capital works programme' under education sector are given as under :—

M. C. D. has 1674 primary schools and 754 Nursery classess. It has 18034 teachers for primary education to 730000 primary students and 48000 nursery students. As the quantum of plan grants over the years has been low, M. C. D. went on constructing prefab classrooms for replacement of tents. Presently, there are several thousand class rooms which have outlived their life which is only 15 years. It is necessary that prefab structures which are over 20 years old need to be replaced with permanent class rooms. Schools which are running in double shifts or have a strength of more than 500 children also need permanent class rooms in the first stage. Where sufficient land is not available multi-storied pucca bldgs. will be constructed.

M. C. D. has to open new schools every year. A provision of 3200 permanent class rooms & 600 prefab class rooms has been made in the VIII Five Year Plan 92-97, although the actual assessed requirement is more. This is due to financial constraints.

It has been proposed to construct lav. sets for which a provision of 250 lav. sets has been made in the VIII Five Year Plan 92-97.

DDA has made available several new sites for the construction of primary schools in their newly developed colonies. Proper boundary walls are necessary to protect this land from encroachments. The construction of b/wall is also necessary to protect the children. Accordingly, a provision for const. of 166 b/walls has been made during the 8th Plan 1992-97.

The primary schools are located in far flung areas and teachers have to cover long distances. It is proposed to provide residential accomodation, to the extent of 10% of the newly recruited staff. The target is to complete 400 staff qtrs. during 92-97.

It is also proposed to improve the existing basic facilities like water supply play grounds within school premises, prayer ground and undertake environmental improvement through horticulture etc.

a. Pucca Class Rooms

There is a massive programme to construct 3200 pucca class rooms in the 8th Plan. Average cost per class room has been compared @ Rs. 2.25 lacs per class room. The pucca class rooms will cope with shortage of space, replacement of pre-fabs and restoration of old buildings. Pucca class rooms are likely to spill over to the 8th Plan.

b. Prefab Class Rooms

There is a target to construct 600 prefab class rooms. Average cost per class room has been estimated at Rs. 75000/- per room. It will cover the ongoing awarded works & class rooms which are being undertaken at the risk & cost of the contractor whose contracts had been rescinded. It will also take care of the additional requirement. It is proposed to construct 150 prefab class rooms during 92-93.

c. Lav. Sets

The 8th Five Year Plan target is to construct 250 lav. sets. One set consists of two water closets and four urinals. Average cost per lav. set has been estimated @ 30,000/- per set. These sets will be constructed on the new school sites/where there is deficiency. Physical target is for 40 lav. sets during 92-93.

d. Boundary Walls

The target is to construct 166 b/walls during 8th Plan 1992-97. Average cost per b/wall has been estimated at Rs. 75000/- each. These also include the raising of old b/walls with M.S. Grill wherever required. Physical target is 25 b/walls during 1992-93.

e. Staff Qtrs.

There is a proposal to provide staff quarters to at least 10% of the teachers and other staff likely to be recruited during the 8th Five Year Plan. This is very essential keeping in view the inadequate housing facilities available with MCD and the housing shortage in Delhi. Accordingly, physical projections for 400 qtrs. of various categories have been made in the 8th plan 1992-97. The average cost per qtr. has been estimated at Rs. 1.5 lacs. Provision of Rs. 600 lacs during the 8th Plan 1992-97 has been made against which there is a proposal to spend Rs. 50 lacs during 1992-93.

It is proposed to augment of Water Supply install tubewells/deep bore, hand pumps, develop & Imp. play grounds/prayer grounds. A provision of Rs. 500 lacs has been made to improve the facility of drinking water, particularly in rural areas & improve play grounds within the school premises/prayer ground etc., wherever required according to site requirement during the 8th Plan 1992-97. A sum of Rs. 40 lacs is proposed to be spent on these facilities during 1992-93.

Physical achievement

The physical achievements between 1-4-35 and 31-3-92 were 816 pucca rooms, 1940 prefab. class rooms, 202 b/walls, 233 lav. sets & 1 Mini stadium.

For the 8th Five Year Plan 1992-97, an outlay of Rs. 9000 lacs is approved for the "Capital Works Programme" which includes Rs. 1600 lacs for the Annual Plan 1992-93.

III—NEW DELHI MUNICIPAL COMMITTEE

1. Elementary Education (6-11 Years)—(Rs. 60 lacs)

N.D.M.C. is determined to make primary education compulsory and universal in its area in the age group of 6-11 yrs. It achieved 99.6% of its aim of universalization of primary education during the 7th Five Year Plan. The population of Delhi has been increasing rapidly day by day. To accommodate the increase in students three new Pry. schools will be set up during the 8th Plan 1992-97. 30 teachers and other staff will be provided. Addl. sections will be added in the existing schools under this programme. Various schools have facilities for teaching Urdu. A Pry. school opened in 1992-93 and one school opened in 1990-91, will continue during 1992-97. Rs. 8 lacs provided for 1992-93, will be utilized. An outlay of Rs. 60 lacs is approved for the 8th Plan 1992-97.

2. Elementary Education (11-14 yrs.)—(Rs. 65 lacs)

The Decade 1990-2000 is being observed as SAARC decade of the girl child.

Aware of its responsibilities and constitutional commitments NDMC will try to make elementary educational universal at all stages in its area for boys and girls.

Efforts will be made to provide educational facilities to the residents of N.D.M.C. One Middle School was opened for girls during 1990-91 and will continue to operate during 1992-97. One H/M, 11 teachers and other necessary staff were appointed. 2 Middle Schools for girls have been opened in 1992-93. A sum of Rs. 10 lacs has been provided for the Annual Plan 1992-93 which will be utilized fully. 2 Middle schools for girls will also be opened during the 8th Plan. An outlay of Rs. 65 lacs is provided for this Scheme in the 8th Plan.

3. *Welfare Scheme—(Rs. 250 lacs)*

Most of the students in NDMC schools belong to the educationally backward of Society. Parents are unable to provide educational facilities to their children. Ill-equipped children can not concentrate on their studies. The scheme has been launched to provide incentives in the form of free text-books, free stationery, free uniforms, free wool, free shoes & socks and scholarships. Under this scheme free text books will be distributed to all the students of Class I to VIII, free stationery to all the students of Class I to V, free cloth for uniforms to all the students of Nursery class to VIII, free wool to all the students of class I to V and free shoes & socks to all the students of Class I to V. Scholarships will be provided on the basis of merit-cum-means to the students of Class IV to XII who are in first three positions and have obtained at least 60% marks (55% marks to SC/ST students) in the annual exam. A sum of Rs. 49 lacs is provided for 1992-93. For the 8th Five Year Plan 1992-97, an outlay of Rs. 250 lacs is approved.

4. *Administration, Supervision, Planning & Statistical Cell—(Rs. 30 lacs)*

An institution can show its efficiency and become result oriented through effective administration, supervision and planning. Timely collection of information about different schemes being introduced by the Govt. from time to time and implementing them leads to effective administration and success. The National Policy on Education 1986 laid great stress on developing and implementing plans and providing for teaching and learning materials. Result oriented programmes and policies will be reviewed and implemented to achieve the goals set by the National Policy on Education. A separate Statistical Cell for administration and planning will be set up during the 8th Five Year Plan 1992-97. The posts of Accountant & P.A. created during 1990-91 will be contd. during the 8th Five Year Plan 1992-97. Additional staff requirement is as follows :—

S. No.	Name of the post	Nos.	Pay-scale
1.	Jt. Director	1	3000-5000
2.	Dy. Director (Edu.)	4	3000-4500
3.	Asstt. Director	1	2000-3500
4.	Sr. Statistical Investigator	1	1640-2900
5.	Inspector of school one for each zone	4	1640-2900
6.	Stenographers	4	Usual scale
7.	U.D.C.	4	do
8.	Store Keeper	1	do
9.	L.D.C./Asstt. Store Keeper	10	do
10.	Peon	5	do

The scheme has an approved outlay of Rs. 4 lacs for 1992-93. For the 8th Five Year Plan 1992-97 an outlay of Rs. 30 lacs is approved.

5. *Nursery Education—(Rs. 25 lacs)*

Nursery education helps students to adopt to the school atmosphere and produces in them a desire for learning. It has proved very effective in checking dropouts and wastage among students at pry. level. It also aims at 100% universalization of elementary education. Two nursery schools opened during the Annual Plan 1990-91 and 1991-92 will continue during 1992-97. 10 Nursery teachers were appointed. Four more Nursery schools will also be set up during the 8th Five Year Plan 1992-97. 10 teachers and other staff will be appointed there. Furniture and other necessary material and equipment will be provided.

The scheme has an approved outlay of Rs. 5 lacs for the Annual Plan 1992-93 and Rs. 25 lacs for the 8th Plan 1992-97.

6. *Qualitative Improvement in Elementary Education—(Rs. 30 lacs)*

The scheme aims at achieving a qualitative improvement in the standard of education besides universalization of elementary education within NDMC area. To raise the standard of education and to bring about alround development of the personality of students a series of activities were introduced in NDMC schools. These activities proved very useful to improve the personality of children within and out of the school. To acquaint the children with the local environment, opportunities are provided to the students studying in NDMC and its aided schools to visit educational, historical and other places. The Environmental study programme has proved very useful for meaningful learning. About 10,000 students will be taken out on educational enviromental tours every year. 15 schools will be converted into model schools. In order to improve the efficiency, necessary furniture, lab. equipment, other material, library books, necessary eqpt. and appliances will be supplied. 2 buses & 2 inspection vans will be purchased during 1992-97. 4 drivers and 2 attendants in the usual scales will be appointed.

During 1988-90 colour T.V. and Radio-cum-casset-player were provided to 62 NDMC schools to acquaint them with the latest developments in all fields. More T.V. set will also be provided to the remaining schools during the 8th Five Year Plan 1992-97. 2 technician and 2 T.V. attendents alongwith Part Time T.V. technical supervisors were appointed during 1990-91. They will continue during the VIII Five Year Plan. An outlay of Rs. 30 lacs is approved for the 8th Five Year Plan including Rs. 6 lacs for the Annual Plan 1992-93.

7. *Capital Works—(Rs. 525 lacs)*

Ec'ational plans and schemes are successful only in a conductive atmosphere. NDMC is trying its best to provide pucca school buildings in place of semi-pucca structures. It is to construct various school buildings during the 8th Five Year Plan 1992-97. Addl. rooms will also be constructed in the various existing school bldgs. An amount of Rs. 135 lacs has been provided for the Annual Plan 1992-93. More will be needed during this period. An outlay of Rs. 525 lacs is approved for the 8th Five Year Plan.

8. *Work Experience and Hobby Centre—(Rs. 5 lacs)*

Work experience has been viewed as purposeful and meaningful manual work at the elementary level. It will be organised as an integral part of the learning process.

Activities like electronics, leather work, wood work, sewing and knitting, batiks etc. will be introduced in schools. Required work experience teachers will be appointed and material will be provided.

Activities will be taken up in accordance with interests abilities and needs of the students. This experience will help the children upon their entry into the work force. Prevocational programmes will be provided to the students at the elementary level which will also help them in the choice of vocational courses at the Secondary and Senior Secondary level. Necessary material will be provided to all elementary classes of NDMC schools. Rs 1 lac provided for 1992-93 will be utilized fully. An outlay of Rs. 5 lacs is approved for the 8th Five Year Plan.

9. *10+2 Pattern of Education—(Rs. 200 lacs)*

To meet educational needs of the citizens of the NDMC area two middle schools were upgraded to Sec. Standard and one Secondary School was upgraded to Sr. Sec. level during the Annual Plan 1990-91. They will be continued during the 8th Plan 1992-97. Necessary staff was provided. One Secondary School for Girls has been opened during 1992-93. One more Secondary and Two Sr. Sec. Schools will also be opened. A sum of Rs. 60 lacs has been provided for the Annual Plan 1992-93 which will be utilized fully. An outlay of Rs. 200 lacs is approved for opening three Secondary and two Sr. Sec. Schools during the 8th Plan.

10. *Vocational Guidance—(Rs. 30 lacs)*

The scheme aims at linking education to productivity and enhancing individual employability. The scheme was approved by the Planning Commission and a sum of Rs. 5.00 lacs was allocated for the year 1990-91. The following vocational courses have been approved for the NDMC Sec. School :—

1. Basic Electronic Technology.
2. Textile designing.
3. Auditing and Accountancy.
4. Stenography and Typing.
5. Nutrition and Food Preservation.
6. Dress Design and making.
7. Health care and beauty centre.

In each of the four Schools, one vocational course was introduced. In place of 4 Junior Counsellors in the grade of (Rs. 1640-2900), 6 part-time teachers were appointed during (1990-91).

To provide flexibility to students, each school will introduce two or three vocational subjects, in addition to the existing one, in a phased manner during 1992-97. The following vocational subjects out of the approved list of the Directorate of Education, Delhi. are also proposed to be introduced in the NDMC Sr. Sec. Schools :—

1. Computer Technology
2. Banking
3. General Insurance

4. Life Insurance
5. Office Management & Secretarial Practice
6. Tourism and Travel techniques

Computers will be purchased and teachers will be trained during 1992-93 so that computer technology could be introduced in schools during the 8th plan.

In place of part-time teachers, full time, regular vocational teachers will be appointed in a phased manner, during 1992-97. To provide vocational guidance to the students, four professionally trained 'Conusellers' will also be appointed. In all, 30 full time vocational teachers/counsellors will be required during 1992-97.

An amount of Rs. 12 lacs has been provided for 1992-93 which will be utilized fully. An outlay of Rs. 30 lacs is approved for the 8th Five Year Plan 92-97.

11. Improvement of Science and In-service Programmes—(Rs. 20 lacs)

Seminars are being organised for in-service of teachers and heads of NDMC and its aided schools. About 400 teachers are oriented every year in the NDMC school of Science and Humanities of Edu. Science. Exhibition are organised every year and the students of NDMC schools take an active part in them.

To improve and enrich the professional competence of in-service teachers, head of schools, supervisory staff etc. it has been decided to strengthen the continuing Plan Scheme of "Improvement of Science and In-service Programmes".

To strengthen the existing In-service Institutions the following additional posts will be created during the 8th Plan 1992-97. A separate building will be constructed. One bus and two vans in addition to the required material will be purchased :—

S. No.	Name of the post	Nos.	Pay-scale
1.	Sr. Lecturers	2	3000-4500
2.	Lecturer/PGT (Geography and EVS)	1	1640-2900
3.	Lecturer/PGT (Biology)	1	1640-2900
4.	Lecturer/PGT (Maths)	1	1640-2900
5.	Lecturer/PGT (Drg. & Painting)	1	1640-2900
6.	Stenographer	2	1320-2950
7.	Chowkidar	2	As usual scales of pay of NDMC
8.	Drivers	1	-do-
9.	Conductors	1	-do-

Rs. 3 lacs will be provided for the Annual Plan 1992-93 which will be utilized fully. An outlay of Rs. 20 lacs is approved for the 8th Five Year Plan.

12. Expansion of Social Education—(Rs. 160 lacs)

Social Education does not mean merely imparting the 3 R's (Reading, Writing & Arithmetic). All development activities fall within adult education. As a result of sustained efforts by the Social Education Department, very good achievements have been

made. Illiteracy still obtains amongst migrant labour and residents of resettlement colonies. There are number of pockets in N.D.M.C. areas where such people reside. The N.D.M.C. has taken various steps to eradicate illiteracy. During the 7th Plan 16 Social Education Centres were opened. Such activities have to be promoted during the 8th Plan as well.

Job-Oriented Centres, Non-formal Centres and Post-continuation Centres/Construction of Building for Day Time School

These Centres will impart training in craft to house-wives as per their aptitude and need. Job oriented programmes will enable them to supplement the income of the family. Non-formal-cum-literacy centres will be meant for school drop-outs. Admission will also be given to children who have not attended school so far. The children studying in these centres will be put back in the formal system of education so that they do not relapse into illiteracy.

Objects of the Scheme

- (i) To provide educational facilities to women of the weaker sections of the society who have to leave their studies due to family circumstances.
- (ii) To provide education to those who are already employed.
- (iii) To provide education to unemployed women.

The following posts will be required during 1992-97 :—

Sl. No.	Name of the post	Nos.	Pay Scale
(a) Job-Oriented Centres—10			
1.	Social Education Teacher	10 Nos.	Rs. 1200-2040
2.	Supervisor	6 Nos.	Rs. 1400-2300
3.	Store Keeper-cum-Clerk	1 No.	As usual scale of pay of NDMC
(b) Non-formal Edu. Centres—10			
1.	Social Education Teacher	10 Nos.	Rs. 1200-2040
2.	Peon	1 No.	As usual scale
(c) Post Literacy Continuation Centres—20			
1.	Part-time Social Education Teachers	20 Nos.	Rs. 100/- P.M.
2.	NewsPapers & Magazines		Rs. 500/- P.M. Per Centre

A school building will be constructed for the Day School. Required material will be purchased.

A sum of Rs. 32 lacs has been provided for the Annual Plan 1992-93 for recurring/non-recurring expdt. and to construct the proposed building. The 8th Plan outlay for the scheme is Rs. 160 lacs.

XVI - TECHNICAL EDUCATION

Technical Education is one of the most important means for creating skilled manpower required for developmental tasks in various sectors of the economy. Technical education incorporates the technological dimension which is a vehicle for development. A well planned system of technical education is a pre-requisite to sustain the rapid pace of development required in our country. Such a system will be called upon to translate the imperatives of modern manufacturing process, state-of-art technology, diversified technological changes and complex training requirements resulting from these changes into the educational planning process.

The future goals and objectives of the technical education system are to produce manpower needed to meet these diversified requirements of the user system. The Directorate of Technical Education shall coordinate its training programme to match the policy of Delhi Administration to encourage the development and establishment of non-polluting, higher value added and Service-oriented Industries.

The following are the major thrust areas needing attention :—

- (a) To remove obsolescence and modernisation of laboratories and workshops.
- (b) To frequently update curricula to include latest development in technologies.
- (c) To introduce broad based programmes in emerging areas like Computer Engineering, Microprocessors, Instrumentation and Control Environmental Engineering and Food Processing Technology.
- (d) To initiate continuing education programmes to train and retrain working technicians to acquire new trends and developments.
- (e) To concentrate on development of managerial and entrepreneurial skills and innovative abilities.
- (f) To consolidate existing facilities and optimize utilization of available resources.
- (g) To improve quality and standard of education.
- (h) To create facilities in emerging areas of technology.
- (i) To develop infrastructure in organisations.
- (j) To interact with Industry and Community.

The educational planners have also given due importance to increased inputs towards development of laboratories, workshops and promoting research and development specially suited to indigenous requirements. There is simultaneously an urgent need for interaction with environment and Community. The benefits of technology should reach the rural population and economically disadvantaged section of society, by providing to them appropriate technology and generating self-supporting means of livelihood. The institutions, instead of working in isolation, must have an effective collaboration with the industry.

The activities, such as, consultancy, remunerative production, continuing education and exchange of technical expertise will be beneficial to both the industry and the institutions.

The programme of technical education envisaged in the 8th Plan has been formulated with major emphasis on consolidation of facilities, upgradation and expansion of existing institutions and improvement of standards, introduction of courses in state-of-art technology in polytechnic, establishment of one more polytechnic for emerging areas of technology. Priority is being assigned to give them their own buildings, infrastructure and necessary wherewithal for maximum growth and optimum utilization of capacity. Land, especially in a Metropolis, is a costly component. So the existing institutions would be allowed to expand themselves by way of increased intake in demand area by providing additionality in space and infrastructure.

The Directorate of Technical Education has geared itself to face the challenge posed by these complex requirements. It will strive to achieve the tasks assigned to it under the National Policy of Education-1986 by devising, adopting and implementing various programmes and schemes as outlined in this 8th Plan Document. The success of these programmes, needless to say, will only be possible with sound financial support and efficient management. Govt. of India, Ministry of Human Resource Development has recommended the case of the Directorate of Technical Education to the World Bank for financial assistance in order to achieve excellence in technical education.

Technical Education is one of the vital components contributing to the system of human resource development, quality of products, services, productivity, standards of living and growth of economy. Due emphasis on development of this sector is, therefore, laid in the planning process of the country.

Technical Education system supplies trained technical and managerial manpower at the level of designers and researchers, technologists and supervisory personnel to sustain the production and manufacturing sectors of the industry. Though Delhi has made significant progress in the field of Technical Education, much yet remains to be achieved by way of consolidating the existing facilities, improving standards of education, modernising laboratories and workshops and expanding facilities in emerging areas of technology,

Industry requires technical personnel at two levels : a cadre which constitutes the top level professionals who occupy managerial positions and take up design and R&D work and another cadre of middle-level technicians who carry out the functions such as, supervision quality control and control of production. The first comprises of graduates and post graduates in engineering while the second, that of diploma holders from polytechnics.

A sound manpower planning approach aims at a ratio of 1 : 3.5 between degree and diploma holders and growth of technical education should accordingly be planned. Polytechnic education is mainly concerned with imparting technical education and training at diploma and post-diploma levels.

For imparting technical education at degree and post-degree level, there are 4 colleges, namely Delhi College of Engineering, Delhi Institute of Technology, College of Art and College of Pharmacy, and for imparting training at diploma level there are 8 institutions. During 90-91, the intake capacity of various courses in polytechnics has

from 2356 to 2717, with this the resultant strength of students in the
 would be as under :—

Name of the Institution	Students strength
Govt. Engineering College, Dhule	1278
Govt. Engineering College, Jalgaon	1525
Govt. Engineering College, Amravati	1450
Govt. Engineering College, Nashik	408
Govt. Engineering College, Solapur	979
Govt. Engineering College, Warananagar	285
Govt. Institute of Commercial Practice	1080
Govt. College of Pharmacy	260
	7265

The responsibility of organisation, administration and management of these institutions rests with the Directorate of Technical Education.

At present, about 7200 students are undergoing training in 4 Boys Polytechnics, 2 Women's Polytechnics, Institute of Commercial Practice and College of Pharmacy. Even after increase of intake capacity of various courses, the intake of diploma-level students is much less than the required intake considering the recommended ratio between diploma and degree level students. The following table reflects the position of intake in certain disciplines :—

S. No.	Name of the discipline	Engineers intake	Technician intake	Technician reqd. intake
1.	Civil Engg.	70	215	280
2.	Electrical Engg.	70	215	280
3.	Mechanical Engg.	100	380	400
4.	Electronics and Communication	40	151	160
5.	Production Engg.	20	45	80

The table clearly indicates that there is a mismatch between the demand and supply position prevailing currently, so there is further scope to increase the intake of diploma students.

The position regarding expenditure during 7th Plan, Annual Plans 1990-92 and allocations for the 8th Plan and Annual Plan 1992-93 is reflected in the following table :—

Institution	7th Plan (1985-90) Expd.	(Rs. in lacs)			
		Expenditure		Approved outlay	
		90-91	91-92	8th Plan 1992-97	Annual Plan 92-93
1. Dte. of Tech. Edun.	601.23	180.60	167.74	1500.00	250.00
2. Delhi College of Engg.	649.12	404.08	697.58	5200.00	1000.00
3. Delhi Instt. of Techno- logy	2002.66	309.08	248.00	4000.00	500.00
4. College of Art	82.94	26.57	27.32	300.00	50.00
Total	3335.95	920.33	1140.64	11000.00	1800.00

ACHIEVEMENTS OF 7TH FIVE YEAR PLAN

The major emphasis during the 7th Five Year Plan period was on the following aspects :—

- (i) Two new polytechnics, one each for boys and girls were started to meet the requirements in electronics, digital electronics and medical electronics and computer engineering.
- (ii) Staffing pattern of the polytechnics was re-organised and restructured based on the recommendations of the "Madan Committee." The aim is to limit the lowest formation of teaching staff to the level of lecturer, with a view to improve academic and institutional standards. The scheme was implemented in the financial year 1988-89.
- (iii) Post diploma course in computer application was introduced in Pusa Polytechnic to make trained personnel available in the emerging areas of Computer Technology.
- (iv) Part-time diploma courses in civil, electrical and mechanical engineering were introduced in G.B. Pant Polytechnic exclusively for SC/ST students to meet the social commitment of SC/ST upliftment.
- (v) A Manpower Monitoring and Evaluation Cell was set up at the Directorate in the year 1989-1990.

Under capital works programme, the building of Institute of Commercial Practice was completed and Institute was shifted to its own well-planned building in Trans-Yamuna area of Patparganj. Possession of land for construction of Kasturba Polytechnic building at Rohini was taken from DDA. Computer labs. were set up in the polytechnics. A Computer Centre in the Board of Technical Education has been set up for computerising results and data processing.

The two new polytechnics which have been started are functioning as guest institutions and are yet to have their independent buildings. The directions laid down

in the National Policy on Education 1986 need to be given concrete shape. The phase of industrial development through which country is passing has created a demand for technical and professional personnel trained in diverse fields. In 7th plan only three new courses could be introduced, courses in emerging technologies and in areas where weakness exists are proposed to be taken up in Eighth Plan.

Achievements during 90-91 and anticipated achievement during 1991-92 are :—

- (i) Following new diploma courses in Emerging Technologies were introduced.
 - (a) Diploma in Plastic Technology in G.B. Pant Polytechnic.
 - (b) Diploma in Mechanical Engg. with specialisation in Maintenance Engg. in Ambedkar Memorial Polytechnic.
 - (c) Diploma course in Garment Fabrication Technology in Aryabhata Polytechnic.
 - (d) Diploma course in Pharmacy exclusively for Women was introduced in Women's Polytechnic.
- (ii) For optimum utilisation of existing facilities in the Polytechnics, the intake capacity of various disciplines where demand is more has been enhanced from 2356 to 2822 students.
- (iii) Part-time course in Electronics with an intake of 30 students were introduced in Pusa Polytechnic as a continuing education programme for ITI Pusa students.

STRATEGY FOR 8TH FIVE YEAR PLAN

In the 8th Five Year Plan the main strategy is :—

- (1) Capacity expansion to meet qualitative and quantitative aspects.
- (2) Introduction of courses in state-of-art technology in Polytechnics.
- (3) Gradual introduction of flexible programmes.
- (4) Establishment of one more polytechnic for emerging areas of technology.
- (5) Regular curriculum revision and development of learning resources.
- (6) Modernisation and strengthening of existing institutions.
- (7) Promotion of industry-institute interaction.
- (8) Strengthening of continuing education programmes and entrepreneurship development.
- (9) To provide own buildings to the two newly started polytechnics namely Kasturba Polytechnic and IV Boys Polytechnic.
- (10) To construct a building for the office of Directorate of Training and Technical Education and Board of Technical Education.

Scheme-wise details are given below :—

Directorate of Technical Education (H.Q.)—(Rs. 130.00 lacs)

The success of the plans and schemes envisaged for growth of technical education will largely depend upon a sound mechanism, comprising functions, such

as planning, executing, co-ordinating, controlling, monitoring and evaluation. This requires strengthening of the Directorate of Technical Education which is entrusted with the responsibility of efficiently managing various organs.

Whereas in sixties, there were only four polytechnics under this Directorate, with a limited in-take, today it has to control seven diploma level Institutions and four degree level Institutions with a considerable increase in the number of disciplines offered and students admitted. At present, the total intake capacity in Polytechnics and Institute of Commercial Practice is around 2500 in 45 disciplines. But, the Directorate is functioning with the same staff strength and structure as it did three decades before. The existing infrastructure at the Dte. of Tech. Education (HQ) is too inadequate to meet the challenges of the new situation.

The National Policy on Education, 1986 has emphasised the need for proper strengthening of Dte. of Tech. Education to plan, implement and develop programmes based on the new thrust areas such as designing technical education system for emerging areas of technology, special target groups, continuing education and improvement and consolidation of the existing technical education system Central Advisory Board of Education, under the Chairmanship of Minister of Human Resource Development strongly recommended that the organisational infrastructure at the level of State Directorate should be strengthened in order to implement the scheme as envisaged in National Policy on Education.

Directorate of Technical Education, Delhi, is headed by the Director, Training & Technical Education, who is a senior I.A.S. Officer and an Ex-Officio Secretary of the Department dealing with entire Technical Education Programme in the Union Territory of Delhi besides Craftsmen Training Programme and Apprenticeship Programme. To assist the Director of Training & Technical Education, at present, there is only one Joint Director who is a senior PCS Officer and an Ex-Officio Deputy Secretary of the Department. This post of Joint Director has, in fact, been created to look after Craftsmen Training side (with the approval of Ministry of Labour). In the absence of any senior person on Technical Education side, Joint Director has also to look after the work of Technical Education. It has been greatly felt that with the growing sophistication and diversification of Technical Education Programme, there is an overall need of Coordination at the top level so that different agencies implementing the programme are effectively and purposefully linked and developed in a supporting manner. Therefore, one more post of Joint Director (T.E.) has been created in the year 1990-91 in the equivalent pay scale of Principal Polytechnic (i.e. in the scale of Rs. 3700-5000) to oversee the formulation of policies, planning of schemes and their follow up with different authorities at state, central and regional level for obtaining their approval, conducting inspection of the Institutions and liaison with All India Council of Technical Education, Technical Teachers Training Institute, Northern Regional Council etc. Planning and Academic Cell of the Directorate has to play a vital role in formulation of schemes and programmes which have to be viable and effective. Planning Cell has to initiate exercises involving estimation of financial resources, critical review of on-going schemes and their evaluation. Work load of Planning and Academic Cell has been considerably increased due to greater qualitative inputs and diversification in new areas of technology. So these cells need to be strengthened. It is therefore proposed to provide two Technical Officers in these branches in a scale equivalent of a Lecturer in the Polytechnic. Necessary facilities in terms of furniture, equipment would also be provided in these branches for proper

set up. Further, the workload of Group-A Gazetted posts has been transferred from the Service Department to this Directorate. Now, the cases pertaining to probation period, crossing of efficiency bar, confirmation, preparation of self-contained note for DPC for Group A posts and Court cases are to be dealt in Administration (Tech.) Branch. The workload has increased tremendously. As such this section also needs to be strengthened. Further it is therefore proposed to create one legal cell to deal effectively all court cases and maintain liaison with Govt. counsel, it is also proposed to create one internal audit cell for timely submission of all audit paras and to provide guidance to the institutions in audit matters. In the Directorate there is also need for one Asstt. Librarian for maintenance of various documents like Tool and Equipment lists, syllabus, prospectus, FRSR, various books of general norms, norms of AICTE, guideline documents provided by World Bank etc.

The following posts are proposed to be created for this scheme in the 8th Five Year Plan :—

		Rs.
1. Technical Officer	2	2200-4000
2. Punch Supervisor	1	1400-2300
3. Statistical Assistant	2	1400-2300
4. Asstt. Librarian	1	1200-2040
5. Asstt./Head Clerk	1	1400-2300
6. Legal Asstt.	1	1400-2300
7. Audit Officer (S.A.S.)	1	2000-3200
8. Jr. Auditor	1	1400-2300
9. Stenographers	2	1200-2040
10. L.D.C.	3	950-1500
11. Class IV	5	750-940

In accordance with the National Policy on Education-1986 and the requirement of present needs, it is essential to take up the work of modernisation of office by introducing computer information system. The following areas have been identified in the Directorate for computerisation :—

1. Offering appointments.
2. Medical Exam. of Govt. Servants.
3. Character antecedents verification.
4. Opening of (a) Personal Files (b) CR Dossier (c) Service Book.
5. Clearance of probation period.
6. Declaration of Q.P.I.
7. Confirmation.
8. Admission Record.
9. Students Records.
10. Preparation of annual/five year plans.
11. Financial sanctions and budgeting.
12. Pay Roll etc.
13. Annual achievements.
14. Nomination of students.

It is therefore, proposed to purchase One more Computer as per the configuration suggested by NPIU for implementation of World Bank assistance programmes. For operation of this configuration system we need one Punch Supervisor in the scale of Rs. 1400-2300 for supervision of computer work in the Directorate. It is also proposed to buy one fax machine, two electronic type-writers, one binding machine, and conversion of 30 Line Intercom set into PABX system through Govt. agency during 1992-93.

Capital Works :—Presently the Directorate of Technical Education is functioning in a small rented building at Rouse Avenue. The building is owned by Dayal Singh Library Trust Society. The space is very limited and does not afford any possibility to expand or consolidate the activities of the Directorate. Besides equally important is the fact that the owner of the building is also pressing hard to vacate the building to which this Administration has agreed. It is therefore necessary that the Directorate should have its own building at the earliest at a suitable place in Delhi. Similar is the situation of Board of Technical Education which is functioning at Old Sectt. and there is no possibility of further expansion there. To save expenditure on use of land a suitable site for construction of Directorate and Board of Technical Education Office has been identified at Nizamuddin (ITI Arab-ke-sarai Complex). PWD Delhi Administration has initiated the exercise to work out feasibility and prepare layout plans and preliminary estimates for construction of new office complex. The drawings and layout plans are under preparation with the Sr. Architect-I PWD. The building will cater for the entire space requirement for the fullfledged Directorate. The estimated cost of construction of building would be Rs. 130.00 lacs. Provision of Rs. 19.00 lacs have been provided in the Annual Plan 1992-93.

2. Board of Technical Education—(Rs. 55 lacs)

The Board of Technical Education was established in 1961 with the objective of conducting examinations for award of certificate/diploma in various Engineering/Non-engineering courses of Government affiliated Institutions. The Board of Technical Education is at present housed in Old Secretariate with a limited accommodation. Scheme proposed by a high powered Committee for better utilisation of the available accommodation has already been implemented and accordingly accommodation for a Computer Centre has been developed.

The Board of Tech. Education carries out functions, such as :—

- (a) Approval of courses and curriculum.
- (b) Making arrangements for conduct of examinations.
- (c) Awarding Diploma/Certificates for various courses.
- (d) Affiliating Institutes for conduct of courses.
- (e) Monitoring of training and standards of education in this institution.
- (f) Laying down norms for admission to courses of study.

Integration of evaluation with the process of teaching and learning with a view to diagnose the weakness and deficiencies in education needs immediate attention. This requires analysis of results, regular monitoring and evaluation of institution with a view to ensure that they are imparting education as per prescribed norms. This has

gained added importance due to addition of many private affiliated institutions and many more are clamouring for affiliation with Board of Technical Education. Further in view of the fact that All India Council of Technical Education has prescribed norms for any technical institution, Board of Technical Education is expected to play more effective role towards qualitative improvement of technical education. This is possible only if Board of Technical Education can ensure that the institution adhere to prescribed norms in terms of infrastructural facilities and a sound management system. Even for the conduct of examination, the present system is under heavy strain as previously the Board was to conduct examination on Annual pattern for a few Engineering and Non-engineering courses but now with the introduction of complete carry over system on semester pattern with six year as upper limit for passing three years diploma course, the process of computation of results has become very complex.

Board of Technical Education, Delhi is at present conducting examination for 11 Government institutions, 9 private affiliated institutions and 5 autonomous institutions. The examinations are conducted for award of certificate/diploma/post diploma for 45 courses of varied nature for about 12,000 candidates. Question papers for about 550 subjects are to be procured and printed every six months.

The existing staff structure of the Board has, therefore, been rendered quite inadequate to handle and cope with the work of examination, curriculum, affiliation etc. of the vast number of institutions affiliated to the Board.

The objective of the schemes are as under :—

- (i) to cope with the increased workload and to bring efficiency in the functioning of Board of Technical Education.
- (ii) to exercise better regulatory measures as envisaged in the constitution of the Board on the affiliated institutions.

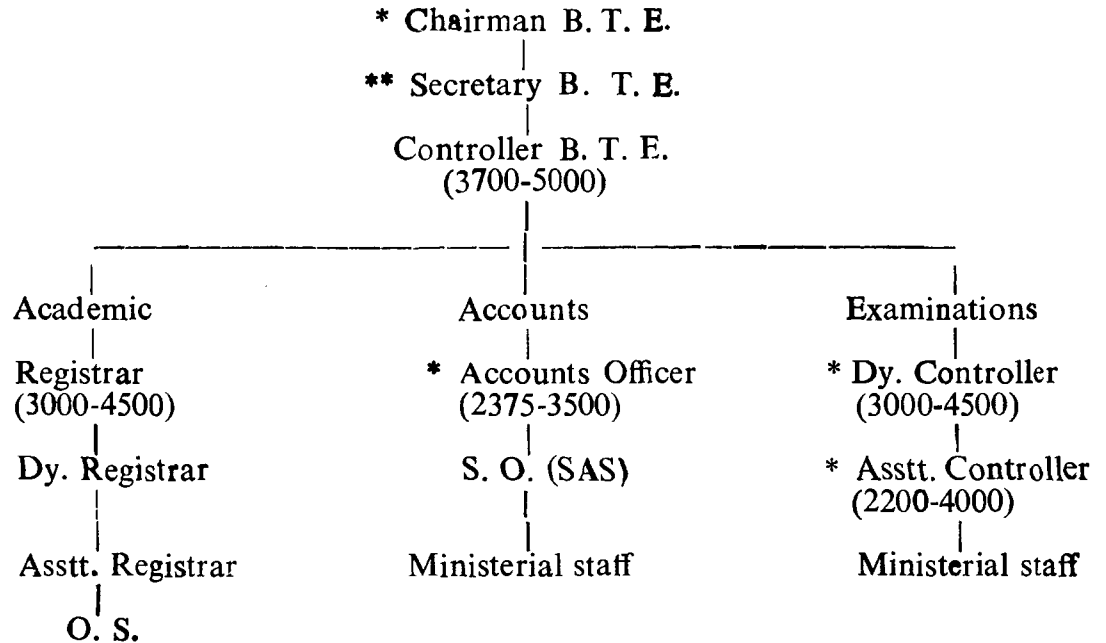
Methodology :—The above objectives can be achieved by bifurcating the functions of the Board of Technical Education into areas of activities as under :—

- (i) academic regulation and the accountability of the institutions.
- (ii) conduct of examination and certification.

The areas of activities of the academic group shall be to periodically raise and approve the curriculum, study and evaluation of schemes, standard tool list, to prescribe entry qualification and intake capacity, to liaise with AICTE, to frame rules for affiliation, students discipline rules, to frame and implement inter-board migration of students.

The areas of activities of the examination group shall be to conduct examination, to moderate and print question papers, development of question bank and declaration of results and award of certificates.

The following structure of the Board has been proposed to meet the above objectives :—



Ministerial staff

- * Chief Secretary Delhi Admn. is the Chairman BTE
- ** Director (TTE) is the Secretary B. T. E.
- * Posts proposed to be created.

The post of Controller, Board of Technical Education in the parallel scale of Principal of the Polytechnic i. e. Rs. 3700-5000 has been created during 90-91. The recruitment rules have been finalised and filling of the post is in process. In the 8th five year plan (92-97), it is therefore proposed to create one post of Deputy Controller of Examination equivalent to Head of Deptt. in Polytechnic and two posts of Asstt. Controller of Examinations equivalent to Lecturer in Polytechnic has been mooted. Board of Technical Education is dealing with about 4000 examiners and has a budget of Rs. 12 to 15 lacs under the sub-head "professional services" as secret account for payment of honorarium to paper setters/examiners/moderators/examination superintendents and printers for printing of question papers. The total budget in the plan and non-plan schemes for the Board of Technical Education is of the order of 27 lacs. The Board also recovers revenue in the form of Examination Fee from the candidates. All this necessitates a very thorough scrutiny of the bills and needs very strict accounting procedure. Hence, the proposal for an Accounts Officer besides the existing post of S. O. (A/C) has been made.

The Board of Technical Education is to be reorganised for laying proper emphasis for its various functional aspects and is going to be provided its own independent building at a centralised campus at Nizamuddin within ITI Arab Ki Sarai complex in the second phase. Appropriate provision has been made for creation of above

posts. Funds will also be provided for purchase of various non-recurring items including furniture, electronic typewriters, duplicating machine, etc.

Approved Financial outlays —

Rs. in lacs	
1992-97	1992-93
55.00	10.00

The building component for the Office of Board of Technical Education has been provided in the scheme "Stg. of Directorate of Technical Education" as the integrated office complex has been proposed to be constructed at Nizammudin.

3. Manpower Monitoring and Evaluation Cell—(Rs. 5 lacs)

There is a need of a reliable information system for identification of technical manpower requirement to aid realistic planning of technical education programmes. With this view Directorate of Technical Education envisaged a scheme which aimed at developing an information system through which it should be possible to ascertain the demand of various types of technical manpower, both current and perspective, so that expansion and diversification of technical education facilities are commensurate with the demand by user agencies.

The objectives of the scheme are as under:—

- (i) Estimation of Short-Term and Long-Term requirement of different categories of engineering and technical manpower in different fields and branches of specialization by conducting periodic surveys of user agencies.
- (ii) Estimation of supply of different categories of engineering personnel by various institutions in the region.
- (iii) Collection and analysis of data to match the job requirement with facilities for education and training.
- (iv) Assessment of future needs of technical personnel in new emerging areas.
- (v) Make recommendations, on the basis of analysis for expansion of intake capacities and facilities for technical education in the Union Territory of Delhi.
- (vi) To maintain liaison with various related agencies Government of India, Ministry of Human Resource Development and Delhi Administration have accorded sanction for creation of following posts for this Cell :—

1. Asstt. Director	1	3000-4500
2. Research Officer	1	1640-2900
3. Technical Assistant	1	1400-2300
4. U.D.C.	1	1200-2040
5. Stenographer	1	1200-2040
6. Class IV	1	750-940
7. Driver	1	950-1500

Posts from S. No. 1 to 6 above have been created and transferred to Non-Plan in 1990-91. Only one post of Driver shall be created during the 8th Plan.

In order to provide mobility for the staff and fulfil objectives for which the scheme has been formulated, a staff vehicle is an immediate need for which provision has been reflected. Separate telephone connection, duplicating machine, two typewriting machines, stationery etc. would be needed for the cell. A survey shall be got conducted through National Institute of Training and Industrial Engineering (NITIE)/ National Technical Manpower Information System (NTMIS) of Institute of Applied Manpower Research (IAMR) to assess the future technician manpower requirement and demand in and around Delhi.

An outlay of Rs. 5 lacs is approved for this scheme which includes Rs. 2 lacs for the Annual Plan 1992-93.

New Schemes

4. State Project Implementation Unit (SPIU)—(Rs. 5 lacs)

The present facilities and infrastructure available at the Directorate are not even adequate to monitor the usual development plans. The building activity is assigned to PWD and procurement of equipment is normally decided by the individual principals. The Directorate only provides policy guidelines, budget and expenditure norms. Only the utilization of funds can be checked up centrally. The checking of physical targets and impacts of development activities is not possible with the existing infrastructure. With the launching of World Bank Project, a suitable set-up is essential for effectively monitoring and evaluating the envisaged activities and norms.

The setting up of SPIU will help the Directorate in organising and controlling the project having estimated cost of Rs. 23.86 crores and require large scale purchases, liaison with M/O. H.R.D., World Bank team and D.G.S. & D. etc. The SPIU at the Directorate level shall have sub units at the polytechnic level. The working unit at polytechnic will comprise of Principal/concerned H.O.D./Directorate's representative/ Technical Experts.

Inputs

For establishing this unit the following staff are required :

Technical Officer	1	2200-4000
Purchase Officer	1	2200-4000
U.D.C.	2	1200-2040
L.D.C./Typist	3	950-1500
Stenographer	1	1200-2040
Class IV	2	750-940

Financial Implication

Non-Recurring :

	(Rs. in lacs)	
1. Equipment	3.00	(P.C. Storage Cabinets, filing Cabinets, Typewriters etc.)
2. Furniture	1.00	
Total	4.00	

An outlay of Rs. 5 lacs is approved for this scheme which includes Rs. 2 lacs for the Annual Plan 1992-93.

5. *Curriculum Development Cell—(Rs. 10 lacs)*

Presently over 45 disciplines pertaining to Certificate, Diploma, Post-Diploma, Under-Graduate and Post-Graduate courses are offered in the various institutions run by the Directorate of Technical Education, Delhi Administration. The curriculum of these courses have to be regularly updated to meet the changing demands of industries so as to include latest advancements in the field of technology. To do so data from field in the form of feed back from passed out students and user agencies is to be collected and analysed to update the curriculum. Till now the TTTI Chandigarh guided the local faculty for developing/revising the curricula. Since the quantum of work has increased with the starting of new courses and new institutions, the present arrangement is not working well. Having a mechanism at the Head Quarter to undertake curriculum development/revision work has become a necessity which can no longer be ignored. These are determinantal to academic standards. Moreover setting of curriculum development cell at the Directorate of Technical Education in each State is an essential requirement of National Policy of Education.

The object is to design curricula on a scientific basis to :

- phase out obsolescence
- introduce new technology
- develop new skills relating to management of change and entrepreneurship
- provide exposure to computers and their use to all students
- induct advances in educational technology
- identify occupational needs of women and design appropriate formal and non-formal programmes
- develop flexible programmes of study for society and economically weaker sections
- monitor and review curriculum implementation and undertake curriculum research studies
- Develop instructional resource material.

The proposed curriculum development cell will be established in the Directorate of Technical Education. The cell will collect data needed for systematic design, development, implementation and revision of curricula of technical education programmes in the state. The cell will monitor the progress of implementation and advice corrective measures wherever required. It will also maintain liaison with other agencies at regional and national level. The cell will organise seminars, workshops and congregations to develop/review curricula. Besides this, the cell will also develop desk manuals, workshop manuals, laboratory manuals and question bank in different subjects of study. Detailed scheme has been framed and sent to Govt. of India Ministry of Human Resource Development for accord of technical approval. The scheme will however be implemented in the 8th Five Year Plan as a spill over scheme.

To implement this scheme following, posts have been proposed for creation.

1. Head of Deptt. (C. D.)	1	3000-4500
2. Curriculum Development Officer	1	2200-4000
3. Asstt. Curriculum Development Officer	1	2000-3200
4. U. D. C.	1	1200-2040
5. L. D. C.	2	950-1500
6. Stenographer	1	1200-2040
7. Driver	1	950-1500
8. Class IV	2	750-940

Besides the salary of the office staff, there is a need for providing office equipment/furniture, van, reprographic facilities and other contingencies. An outlay of Rs. 10 lacs is approved for this scheme for the 8th plan which includes Rs. 2 lacs for 1992-93.

6. Introduction of Flexibility—(Rs. 2 lacs)

The rigid system of programmes does not provide enough flexibility of courses. It also lacks options to the students to learn the courses at their own pace. The rigid system treats different groups of students alike irrespective of difference in their entry level, knowledge and skills. The rigid structure has caused frustrations to some groups and difficulties and problems to others, thereby causing inefficiency and lack of quality in the system. Rapid technological advancement in different disciplines has necessitated the offering of a wide range of programmes of varying duration and different entry requirements to meet the diverse manpower need within and across disciplines. National policy on education also expends flexibility in technical education facilities so that access is not restricted to only those who fulfil strict entry requirements as required for all courses.

In view of above, there is a need for introducing modular pattern of education and distance education which provide opportunity to a student to study courses of his choice according to his needs and at a pace which he can cope up with. The modular pattern of programme will have the following features :—

- (i) The whole programme will be organised into modules such that several modules constitute the programme.
- (ii) A student would be expected to offer and complete a specified number of modules in order to earn Degree/Diploma.
- (iii) The pattern will enable different students to choose different modules so that each student chooses his own mix of modules to suit his job profiles.
- (iv) If he wishes to leave the course for a short while he can leave and rejoin the course.
- (v) Modular pattern would allow for preparatory course when students come from different backgrounds, particularly those from weaker sections, rural areas or where the previous education contained some deficiencies.

- (vi) The system would also enable to switch over disciplines if a student is not able to pull on in a particular discipline.
- (vii) The student will have to obtain requisite number of credits to complete the course.

It is proposed to introduce multi-point entry and credit system in the following disciplines :—

- (1) Diploma in Electronics with specialisation in Digital and Micro Process System & Medical Electronics.
- (2) Diploma in Computer Engineering.
- (3) Diploma in Instrumentation and Control.
- (4) Part time diploma course in Electronics & Communication.

Although these programmes are diversified in nature still there is a need for specialisation in certain selected areas considering the present industrial scenario.

An outlay of Rs. 2 lacs is approved for this scheme which includes Rs. 1 lac for 1992-93.

7. *Removal of obsolescence and Modernisation of laboratories and W/shops—(Rs. 130.00 lacs)*

One of the high priority areas in the new National Policy on Education is removal of obsolescence and modernisation in the institutions by providing equipment and machinery in consonance with the current and futuristic advancement in science and technology. Most of the equipment that was procured at the time establishment of Polytechnic in 1962 has outlived its utility and needs replacement. Some equipment has become outdated due to the advent of new processes and technologies and requires substitution. Concerning modernisation, there is a need to undertake technology forecasting and technology assessment studies and establish laboratories with equipment pertaining to emerging technologies. Modernisation of laboratories and workshop is also undertaken as a consequence of changes in Curricula taking place from time-to-time to cope with the upcoming technologies. The widespread use of computers in various fields has necessitated setting up of computer laboratories in each institution to provide training in the use of computers for various applications. Use of sophisticated instruments and control systems in an increasing way demands that students are well conversant with their use. NPE lays stress on universalization of Research & Development Culture in all technical institutions. This is possible only if infrastructural capability for research is built up in the institutions by providing adequate facilities in the laboratories and workshops. Thus, the objectives of the scheme would be :—

- (i) to replace the obsolete machinery and equipment which have outlived their life with the latest type; and
- (ii) to provide additional modern/sophisticated equipment due to advancement to technology ;
- (iii) to equip the laboratories and workshop with support facilities matching with the equipment procured.

To achieve the above objectives and provide physical facilities, equipment and machinery to the tune of Rs. 130.00 lacs will be procured by the institutions under the Directorate during 8th five year plan and Rs. 30.00 lacs for 1992-93.

8. *Library facilities and Audio Visual aids—(Rs. 30.00 lacs)*

The concept of library as a place for storing and issuing of books is outdated. A wide variety of learning resources comprising graphic records in the form of books, periodicals, films, slides, microfilms etc. has brought a radical change in the concept of library. It becomes a workshop where an individual can interact with the media to be successful in his pursuit of knowledge. It is therefore, imperative to extend all possible means to ensure proper environment, accessibility and exposure of graphic needs to the user. The institutions must give priority to library development side by side with laboratory development. The greatest constraints in doing so being lack of necessary funds. The polytechnic library exists on a shoestring budget. It has been observed that libraries in Polytechnics, at present, have a very limited stock of books and journals. There is a need for large number of reference books, technical encyclopaedias, technical dictionaries, directories, handbooks yearbooks and alike for consultation. The organisational set up of library also needs improvement. The staff provided at present is quite inadequate to manage the multifaceted activities of the library.

The objectives of a good library should be :

- to provide text and non-text material in the form of text books, reference books, journals, films, transparencies and other audio-visual material
- to provide adequate teaching resource material to teaching staff.
- to anticipate demand and acquire books/materials in subjects likely to be introduced.
- to assist the readers to get the relevant information and to interpret the reading materials to them.
- to establish links with other libraries in the area for exchange of information.

The library should be able to provide following services :—

- to provide list of additions
- to provide reference services
- to provide news briefs
- to provide retrospective bibliography
- to provide selective dissemination of information
- to provide reprographic facility.

The libraries and learning resource centres of all the institutions will be reinforced by providing technical journals (Indian and Foreign) books in Science, Engineering and Technology and other facility, such as, audio visual aids, educational films, video cassettes, computer aided programmes, CAD/CAM packages, produced by Technical Teacher's Training Institutes, UGC, ITIs and other educational research centres, and from other proprietary item manufacturers. It is proposed to create learning resource utilization cells in each institutions. Resource materials may be prepared by the staff themselves or with the help of experts. The cell will prepare materials, such as, lecture notes, frame slides, video films and film strips etc. for use by the teachers in the class rooms. It is also essential to provide adequate trained staff as per

the need recommendation of working group in the workshop held on 21-23rd Aug., 91 for each polytechnic.

1. Head (L R U C)	1	(at par with the Head of Deptt. scale).
2. Senior Information/ officer Sr. Librarian	1	(at par with Sr. Lecturer)
3. Information Officer/ Librarian	3	(at par with Lecturer)
4. Library Assistant	2	
5. Library Attendent	4	
6. Photographer	1	
7. Peon	2	

An outlay of Rs. 30 lacs is approved for the scheme for the 8th Plan which includes Rs. 5 lacs for 1992-93.

9. Strengthening of hostel facilities in the existing institutions—(Rs. 10 lacs)

Institutions in Delhi provide for 10 per cent seats for outside students. In addition to this, a considerable number of students nominated by various states and foreign nationals also seek admission. There is an increasing demand for hostel facilities by local students because the workload of studies in technical institutions is more rigorous and students can devote full attention with residential facilities. They get more opportunities for mutual interaction and thus can discuss their difficulties.

Programme of Action for implementation of National Policy on Education-1986 has also indicated that every technical institution should provide for hostel facilities to the extent of 100% for girl students and at least upto 50% for boy students. The hostels should be equipped with furniture and all other basic amenities should be available for proper living and comforts. The inmates should have messing and recreational facilities. Presently only G.B. Pant Polytechnic and Women Polytechnic have their own hostel building. The accommodation and amenities in all these institutions is far from adequate. In the existing hostels about 250 students can be accommodated. In the 8th Plan strengthening of existing hostels and expansion of facilities will be taken up. Proper infrastructure will be created in terms of staff, equipment and space for common room and dining hall.

The following posts have been created during 1990-91.

	Nos.	Rs.
1. Hostel Superintendent	2	1400-2300
2. Class-IV staff	3	750-940

The additional posts as given below are proposed to be created during 8th Five Year Plan as the department is constructing hostels in the College of Pharmacy

Campus for 40 boys and 20 girls. Standing Finance Committee has accorded approval for construction of hostel block in the college of Pharmacy.

	Nos.	Rs.
1. Hostel Supdt. (One for boys and one for girls hostel)	2	1400-2300
2. L.D.C.	1	950-1500
3. Class-IV staff	6	750-940

Other physical facilities

1. Replacing of Condemned furniture and purchase of essential furniture required in the hostel, utensils required in the mess and in kitchen furniture for dining hall etc.
2. Recreation facilities for the inmates

Approved Financial outlays :—

	(Rs. in lacs)	
1992-97		1992-93
10.00		3.00

10. Consolidation of existing facilities and augmentation of intake in Polytechnics—
(Rs. 20.00 lacs)

(A) Consolidation of existing facilities

The scheme envisages consolidation of existing facilities and optimal use of resources for getting maximum returns on the investments made on technical education in the previous plans. Considering the high investment that goes into the setting up of a new technical institution, it will be desirable to fully utilize the space and equipment in the existing institutions rather than allowing proliferation of new, institutions in conventional courses of study. Land, especially in a metropolis, is a costly component. So, greater consideration must be attached to optimize utilization of available space in the existing institutions. Vertical expansion can be had by providing additional floors in institutions having limited land but institutions having larger premises can create additional space by constructing extension blocks. Efforts will be made to expend the facilities for training in laboratories and workshops so that bigger batch of students can be accommodated. Additional tools and equipments will be made available to supplement the existing facilities. Similarly, it is proposed to make up the inadequacies of staff by creating additional posts.

The staff structure in Polytechnics has recently been revised under the recommendations of Madan Committee. The first phase of 40% related to positioning of staff in the teaching category has been covered during 7th Plan Period. The balance is to be implemented during 8th Plan. Also, as a fallout of this restructure additional staff & infrastructure to support the practical training and administrative functions in the institutions is proposed to be provided during 8th Plan.

(B) Development of two newly established Polytechnics

In its commitment to expand facilities for technical education in emerging areas of technologies, the Directorate of Technical Education set up two new Polytechnics in the 7th Plan Period in the year 1987, one for boys and the other for women and run as guest Institutions in the existing campuses. Priority will be assigned to provide these institutions with their own building and infrastructure so that these attain full capacity of student strength. Considerable groundwork for which has been done in the last year of the 7th Plan. These institutions would require their own buildings so that the facilities are fully provided to make them independent and completely operational during the 8th Five Year Plan. Provision of additional staff will be made during 8th Plan Period.

(C) Augmentation of intake in Polytechnics

Another area where cost effectiveness can be achieved is optimization of intake capacity of institutions. Training facilities can be enhanced by increasing the intake wherever there is scope of accommodating more number of students in disciplines where demand exists. There is still demand for technicians in Mechanical Engg., Production Engg. and Electronics and Electrical Communication. The two new Polytechnics offering courses in Electronics with specialization in Digital and Medical Electronics and Computer Engg. have at present limited intake capacity of 30 students because these are functioning as guest institutions in existing Polytechnics. From the academic session 90-91, the intake capacity has been enhanced to 45 each in both the disciplines at these institutions. In the Computer Engineering and Electronics course 60 students will be admitted at these institutions with effect from 92-93 as per the approved capacity. This proposal of augmentation will have an impact on overall expansion of infrastructure.

Additional teaching Staff for both the Polytechnics due to augmentation of intake in the Computer Engg. and Electronics courses from 30 to 60 students would be created as per norms of AICTE.

Following additional posts (Ministerial and Class IV) are proposed in the existing Polytechnics due to their expansion.

G.B. Pant Polytechnic :

1. Store/Purchase Officer	1	2200-4000
2. Head Clerk	1	1400-2300
3. Library Attendant	1	950-1500
4. U.D.C.	1	1200-2040
5. Despatch Riders	2	950-1500
6. L.D.C.	1	950-1500
7. Sweepers	6	750-940
8. Chowkidars	10	750-940

Women's Polytechnic :

1. Store/Purchase Officer	1	2200-4000
2. Office Supdt.	1	1640-2900

3. Library Attendant	1	950-1500
4. U.D.C.	1	1200-2040
5. Despatch Rider	1	950-1500
6. L.D.C.	1	950-1500
7. Daftary	1	875-1050
8. Sweepers	2	750-940
9. Chowkidars	2	750-940

Pusa Polytechnic :

1. Store/Purchase Officer	1	2200-4000
2. Head Clerk	1	1400-2300
3. Library Attendant	1	950-1500
4. U.D.C.	1	1200-2040
5. L.D.C.	2	950-1500
6. Sweepers	4	750-940
7. Chowkidars	3	750-940

Arya Bhatt Polytechnic :

1. Store/Purchase Officer	1	2200-4000
2. Head Clerk	1	1400-2300
3. Library Attendant	1	950-1500
4. L.D.C.	1	950-1500
5. Sweepers	4	750- 940
6. Despatch Rider	1	950-1500
7. Chowkidars	2	750- 940

Institute of Commercial Practice :

1. Head Clerk	1	1400-2300
2. U. D. C.	2	1200-2040
3. Despatch Rider	1	950-1500
4. L. D. C.	2	950-1500
5. Library Attendant	2	950-1500
6. Sweepers	3	750-940
7. Chowkidars	3	750-940

Due to non-availability of prescribed norms for non-teaching staff, the staff proposed for G.B. Pant Polytechnic, Women's Polytechnic, Pusa Polytechnic, Aryabhat Polytechnic and Institute of Commercial Practice shall be created during 8th Five Year Plan after the work-study report and recommendations submitted by Administrative Reforms Department of Delhi Administration. Necessary steps have already been taken and the proposal is at present under consideration with A.R.D.

These institutions shall be provided additional facilities for effecting efficiency and Modernisation by providing items such as Staff Vehicle, Motor Cycle, furniture for office, staff and class rooms, telephones (official and residential) and other office equipment.

Approved Financial outlays :

(Rs. in lakhs)

1992-97	1992-93
20.00	10.00

11. *Construction of Ambedkar Memorial Polytechnic at Patparganj—(Rs. 150 lacs)*

4th Boys Polytechnic was started in the year 1987 as a guest institution in Pusa Polytechnic. Land measuring 5 acres was identified by the Delhi Development Authority at Hindon cut in trans-Yamuna area in the year 1984-85. However, due to encroachment on this land, DDA failed to handover possession of this land. Since DDA could not provide alternative site in trans-Yamuna area, this Directorate has decided to construct separate complex for this institution in the land available at Institute of Commercial Practice in Patparganj. The feasibility has already been identified in consultation with PWD. Preliminary estimates amounting to Rs. 405 lacs have been framed by PWD. S.F.C. has accorded approval for construction of this project. Administrative approval and expenditure sanction amounting to Rs. 405 lacs has also been issued. The drawings have already been submitted to local bodies (DDA) for necessary clearance. The work would start during this current financial year. However, the major expenditure would be incurred in the 8th Five Year Plan period. It is planned to complete the construction work during 8th Plan itself. Provision of Rs. 150.00 lacs is approved in the 8th Plan, as per the estimates framed by PWD. Provision of Rs. 6 lacs has been provided in the Annual Plan 1992-93.

12. *Stg. and Construction of Kasturba Polytechnic Building at Rohini—(Rs. 350 lacs)*

Kasturba Polytechnic for Women was started in 1987 as a guest institution in the Women's Polytechnic, Maharani Bagh. This institution is proposed to be established in West Delhi with a view to have geographical dispersal of institution in Delhi. To provide an independent building and campus for this Poly. land measuring 4 acres has been acquired from DDA in Rohini. Construction of boundary wall at the site has been completed during 90-91. However, the main work for the building including class rooms, labs., workshops, hostel block would be taken up in the 8th Five Year Plan period.

Earlier land measuring 9.16 acres was allotted to this Directorate by DDA at Pitampura. DDA has suo-moto cancelled the allotment on the pretext that the area is to be developed as park-cum-tourist complex. The cancellation was formally contested by the department with the DDA. Now the matter has been placed in the Standing Committee for restoration of land to this Directorate. This is primee land ideally suitable for establishment of Kasturba Polytechnic for Women. If the permission is granted by DDA to build the building at the site at Pitampura, the building can come up much faster within two three years. The estimated cost of construction would be Rs. 350.00 lacs. The same is approved in the 8th Plan. Out of this provision of Rs. 7 lacs has been approved in the Annual Plan 1992-93.

13. *Continuing Education Entrepreneurship Development Programmes—(Rs. 20 lacs)*

(A) Continuing Education Programme

The National Policy of Education and Programme of Action formulated by Government of India, Ministry of Human Resource Development envisages continuing education and distance learning. All India Council of Technical Education and State Directorates of Technical Education are to formulate schemes to assess the needs of continuing education. The institution selected for this purpose in consultation with user system and professional bodies offer relevant programmes of part-time studies on sequential and modular pattern resulting in award of degrees and diplomas. The strategy for designing technical education system through continuing education must be integrated with the overall technical education system. In the 8th Five Year Plan under continuing education programme, it is proposed to undertake the following activities :—

- (i) Consolidation of part-time diploma course in Civil, Electrical, Mechanical at Arya Bhatt Polytechnic and G. B. Pant Polytechnic.
- (ii) Introduction of part-time diploma course in Electronics at Pusa Polytechnic.
- (iii) Introduction of part-time post diploma course in Industrial Engineering at Arya Bhatt Polytechnic.

(i) Consolidation of part time diploma courses in Civil, Electrical, Mechanical at Arya Bhatt Polytechnic

Scheme for part-time diploma (evening course) in Civil, Electrical, Mechanical is being implemented from the year 1973-74 by Directorate of Training and Technical Education, Delhi Administration with the approval of Government of India. Presently for conduct of the classes, the faculty staff members are drawn from teaching institutes and other professional organisations and honorarium is paid to them on hourly rate basis. For the last few years great difficulties are being experienced to engage faculty staff members for coaching these classes because rate of remuneration admissible to them are not attractive. This course is of immense utility for working technicians for upgrading their technical knowledge and enhancing their competency. Therefore, it has gained much popularity and demand. This programme needs to be strengthened by providing regular staff and other infrastructural facilities.

(ii) Introduction of part-time diploma course in Electronics

There is a drastic development taking place in the Electronics Industry and the demand has risen in the specialised courses like electronics, computer engineering etc. The Directorate of Training and Technical Education presently conduct diploma course in electronics and electrical communication engineering at Pusa Polytechnic as a full-time course. The infrastructure facilities except the staff are already available at Pusa Polytechnic. In view of the existing position part-time diploma course in Electronics at Pusa Polytechnic with an intake of 30 students has been introduced w.e.f. 1990-91. The course will continue in the 8th Five Year Plan. For conducting this 4 year course, part-time faculty will be required in addition to other normal expenditure on training material.

(iii) Introduction of part-time advance diploma course in Industrial Engineering at Arya Bhatt Polytechnic

The manufacturing industries involved in mass production in all technological areas are fast growing in and around Delhi. The manpower need in the field of industrial engineering has been a long felt one. The candidates having Mechanical Engg. background are not sufficiently exposed to the details of industrial engineering required in the industries. Therefore the department is proposing to introduce this continuing education programme at Arya Bhatt Polytechnic. National Institute of Training and Industrial Engineering (NITIE) has been approached to develop a suitable curriculum for the same. Northern Regional Council of AICTE is being approached for granting necessary permission to start the programme.

B. Entrepreneurship Development Programme

Directorate of Technical Education proposes to set up entrepreneurship Development Cell in technical institutions. The function of EDC will be :

To inculcate entrepreneurship values and providing training inputs;

To organise entrepreneurship resource camps;

To introduce curriculum on entrepreneurship development as an elective subject;

To organise short-term courses by inviting experts from organisations to provide necessary guidance to students to set up their own industries.

Following regular posts are required to be created for consolidation of part-time diploma courses at Arya Bhatt Polytechnic :

Teaching

1. Vice Principal	4500-5700	1
2. Head of the Deptt.	3700-5700	3
3. Sr. Lecturers	3000-4500	3
4. Lecturers	2200-4000	14
5. Workshop Supdt.	3000-4500	1
6. Foreman Instructor	2200-4000	4

Supporting Staff

7. Workshop Instructors	1400-2600	3
8. Librarian	1400-2600	1
9. Workshop Attdt.	950-1500	3
10. Lab. Assistant	1200-2040	1
11. Office Supdt.	1640-2900	1
12. U.D.C.	1200-2040	3
13. L.D.C.	950-1500	3
14. Class IV/Cleaners	750-940	12

The detailed scheme has been sent to the Northern Regional Committee of AICTE. The Expert Committee has recommended the staff structure as mentioned above. The proposal is presently under consideration with the AICTE.

For part-time advance diploma course in Industrial Engineering at Arya Bhatt Polytechnic the following regular posts are required on the pattern of post diploma course already running at Pusa Polytechnic :

1. Head of Deptt.	3000-4500	1
2. Lecturers	2200-4000	3
3. Lab. Assistant	1200-2040	2
4. Part-time faculty and supporting staff as per requirement		

For P.T. diploma course in electronics (4 year course) at Pusa Polytechnic presently part-time faculty are being engaged. However the core faculty required for the course shall be worked out on the pattern of Arya Bhatt Polytechnic and the proposal shall be submitted to N.R.C. for approval so that the recommended posts are created during the plan period.

Approved Financial outlays :

1992-97	(Rs. in lacs)	1992-93
20.00		06.00

14. Establishment of Maintenance Cell in Institutions—(Rs. 10 lacs)

In the existing Polytechnics in Delhi, there are over 100 laboratories and workshops related to physics chemistry, civil, electrical, mechanical, electronics, computer, instrumentation and control etc. Every year sufficient amount of expenditure has to be incurred. The reasons for the establishment of this maintenance system are (a) lack of skilled manpower, (b) paucity of appropriate tools and equipment for repair of these equipment, (c) non-availability of repair facilities in the local/nearby areas, (d) cumbersome financial procedure for undertaking repairs of equipment.

With the introduction of specialised courses in the Polytechnics, a number of specialised laboratories equipped with modern and sophisticated equipment will come up in the coming years. These additionalities are required to be properly installed at various locations in the buildings. In the absense of a separate unit within the system, it will not be possible to maintain these laboratories and workshops in good condition and this in turn would create a severe hindrance in the learning process of the students apart from low utilization of equipment.

Presently the maintenance of civil works is handled by the P.W.D. for which separate annual funds are allocated. The procedure followed consists of awarding of work by PWD for annual repairs of buildings to contractors. There is no provision for day-to-day maintenance of the civil works with the result that the immediate repairs have also to wait till the time when annual repairs are undertaken. Also, the provision of funds made available for repairs and maintenance of buildings is too meagre. There is, therefore a need to set up a unit for maintenance of buildings and equipment for attending to day-to-day repairs as well as for undertaking essential preventive maintenance.

Such a step will substantially increase the utilisation factor of the available equipment. This activity will also improve the skills of the students due to the availability of essential repair equipments in the laboratories and workshops. The buildings of any other civil work wanting repairs will be attended to immediately resulting in increased useful life as well as cleanliness of the campus. The unit will also undertake repair of furniture.

Activities of the unit would be :

- (i) To assess the requirements for tools spares and consumables needed for the repair and maintenance of lab. and workshop machineries.
- (ii) To carry out day-to-day repair and maintenance of buildings, labs. and workshops.
- (iii) Shifting and installation of equipments.
- (iv) Procure raw material, tools etc. required for repair and maintenance.
- (v) Engage labour/technicians on daily wage basis, if required for specialised jobs.
- (vi) Set up procedure and schedule for repairs of specialised equipment by the central units.

Following staff are proposed to be created under the scheme :

		Rs.
1. Maintenance Engineer	6	2200-4000
2. Electrician	6	1200-2040
3. Plumber-cum-Fitter	6	1200-2040
4. Massons	6	1200-2040
5. Helper/Class-IV	6	750-940
6. L D.C.	6	950-1500

Financial Implications

<i>Non-Recurring</i>	<i>(Rs. in lacs)</i>
1. Furniture/tools etc.	1.00
<i>Recurring</i>	
1. Staff salaries	3.00
2. Consumables	4.00
3. Operation, maintenance and other recurring expenditures	2.00
Total :	10.00

Approved Financial outlays :

(Rs. in lacs)

1992-97	1992-93
10.00	2.00

15. *Expansion and Modernisation of Printing Technology Department at Pusa Campus*
—(Rs. 100 lacs)

With the revolutionary changes that have taken place in the printing technology in the past decade, the necessity for creating a band of trained technicians has become exceedingly important. Hot metal composing machines e.g. Lino-mono on the letter press side have been virtually replaced by computerised film-setters all over the world. Similarly, conventional Litho Zinc Plates have given way to presensitised micro-grained aluminium plates. In the field of colour separation, Electronic Scanner have come to play a significant role. These are only a few example of the changed technological complexity. In the analysis, it would appear that the letter press printing has been overwhelmingly taken over by Photo-lithography. On the offset side, the use of Web Offset and the Photo-polymer plates (dry offset) is a significant development. Printing industry is moving in a most challenging way. Time is not far when a "new wave" will appear and the technology of today may undergo yet another transformation. In order that our industry has a respectable place in the universe of printing and publishing, efforts should be made to keep ourselves constantly abreast with the forthcoming new developments. It is in this context that the expansion of the existing Department of Printing Technology will go a long way in meeting the requirements of 21st century.

With the increasing demand for trained personnel by the printing industry, a course at Diploma level was started in the year 1973 at Pusa Polytechnic of 3 year duration with an intake capacity of 30 students. The students are usually trained in Diploma level courses with larger facilities in letter press printing.

With a view to assess the existing facilities of training in Printing Technology and the future requirements on the basis of the industrial and technological development taking place, EDCIL has conducted a survey on behalf of Delhi Administration involving industries, passed out students and experts in the concerned field. On the basis of the same, it can be concluded that there is a need to expand the existing department of Pusa Polytechnic at Diploma level and to start a degree course at a later stage.

The existing Department of Printing Technology at Pusa Polytechnic shall be expanded and a new curriculum which would help in overcoming the existing shortcomings of training shall be adopted and all modern facilities shall be provided.

Besides this, the intake capacity at Diploma course shall be increased with a provision of introducing four years degree course at a later stage. For this purpose, a new block for department of printing technology will be required. At present the space available in Pusa Polytechnic is so tight that extension of this department within the space available will not be possible. For this purpose, the old building of B.T.C. at Pusa which has long outlived its life and is declared dangerous in parts will be demolished and the land will be utilised for construction of new block of Printing Technology. This would necessitate a substantial Capital expenditure. The requirement of staff would also be drastically changed.

In the 7th Five Year Plan there was a scheme for setting up of a separate institute for institute of printing technology at Pitampura. But after detailed analysis, it has been decided by the Delhi Administration that instead of starting mono-disciplinary

institute it would be better to expand modernise the printing technology department already functioning in the Pusa Polytechnic campus. The Printing Technology is a fast expanding area which requires to be modernised at appropriate level to meet the requirements of the present industries. The curriculum will also be revised and short-comings of training would be removed and all modern facilities would be provided. The intake capacity of diploma course in printing technology would also be increased. For this purpose the old building of Basic Training Centre Campus at Pusa Campus will be demolished and the land utilized for creating a computer block for the Department of Printing Technology there. Provision of Rs. 100.00 lacs is approved for this project. Land acquired in Pitampura is being retained in land bank for construction of another polytechnic in the future. Provision of Rs. 6 lacs has been provided in the Annual Plan 1992-93.

16. *Extension blocks for existing Polytechnic buildings—Arya Bhatt Polytechnic, Pusa C.O.P.—(Rs. 80.00 lacs)*

To realise the full potential of ground coverage and expand facilities for increasing the intake of students, an additional block is proposed to be constructed at Arya Bhatt Polytechnic to provide requisite infrastructure to labs., workshops, students amenities, part-time office, canteen, bank extension counter etc. In the Arya Bhatt Polytechnic, it is proposed to start additional courses like diploma in garment technology, Post diploma in Industrial Engineering etc. It is, therefore, essential that additional floor may be constructed on the existing building. In the Pusa Polytechnic, it is proposed to construct separate canteen block, students amenities block and cycle sheds on the rear side of mechanical engineering block so that rooms occupied for these purposes in the main building can be utilised for training purpose. Similarly in College of Pharmacy, there is a need to construct additional/extension block during 8th Five Year Plan period in order to accommodate the proposed additional intake in D-Pharma and B-Pharma course and for introduction of M-Pharma courses in new areas. The provision of Rs. 80.00 lacs is approved for extension of building in the 8th Plan. Provision of Rs. 5 lacs has been provided in the Annual Plan 1992-93.

17. *Opening of New Polytechnic—(Rs. 85.00 lacs)*

The large population of students running to a figure of 1,12,000 passing out at Secondary and Senior Secondary stages from Delhi schools causes a great rush of admission seekers in the Polytechnics. Every year nearly 18-20 thousand students apply for admission in these institutions and only students securing around 80% marks succeed in getting admission. Further, the industrial growth in Delhi has also taken a leap and many industrial towns around Delhi like Faridabad, Ghaziabad, Noida, Gurgaon and Ballabgarh have come up. These industries usually absorb middle-level technicians. With the development and advancement of technology, it has become necessary to introduce more courses suited to the requirement of the industries and in specialised areas. Rapid development and advancement in the field of Electronics, Computer, Instrumentation, plastic, medical instrument, food technology, environmental control etc. has resulted in increase in a demand of trained technicians in these areas.

It is, therefore, proposed to start one more Polytechnic in Delhi to introduce Diploma and Advanced diploma courses in emerging areas of technologies and areas where exists. Taking into consideration the geographical dispersal of the existing institutions, it is proposed to establish one Polytechnic in Papankala (Dwarkapuri) in West Delhi, in order to serve all corners of the metropolis.

Looking to the indentified needs of manpower, 5 diploma and two advanced diploma programmes in this new Polytechnic are proposed as under :—

S. No.	Name of the Course	Intake	Duration
1.	Diploma in Chemical Engg.	30	3 yrs. (Regular)
2.	Diploma in Plastic and Polymers	30	3 yrs. (Regular)
3.	Diploma in Computer Engg.	30	3 yrs. (Regular)
4.	Diploma in Electronics and Communication Engg.	30	3 yrs. (Regular)
5.	Diploma in Mechanical Engg.	30	3 yrs. (Regular)
6.	Advanced Diploma in Industrial Engg.	15	1½ yrs. (P/Time)
7.	Advanced Diploma in Petrochemical Engg.	15	1½ yrs. (P/Time)
		180	

Immediate survey work will be undertaken to identify the need of technical manpower with diploma and advance diploma qualification in emerging areas and based on this survey, approval of AICTE regarding introduction of new courses would be obtained. Delhi Administration has already requested DDA to allocate 6-7 acres of land in Papankala.

The staff required have been tentatively worked out based on the norms of AICTE i.e. (1 : 10) ratio of staff and students.

Sl. No.	Name of the post	No. of posts	Pay scale
			Rs.
1.	Principal	1	3700-5000
2.	H.O.D.	5	3000-4500
3.	Sr. Lecturer	12	*2200-4000
			(* to be approved by GOI)
4.	Lecturer	24	2200-4000
5.	Forman Instructor	6	2200-4500
	Total :	48	

Supporting Staff

Sl. No.	Name of the post	No. of posts	Pay scale Rs.
1.	Office Supdt.	1	1640-2900
2.	S.A.S. Acctt.	1	2000-3200
3.	Stenographer	1	1200-2040
4.	U.D.C.	5	1200-2040
5.	L.D.C.	6	950-1500
6.	Chowkidars	6	750-940
7.	Sweepers	4	750-940
8.	Peon/Cleaners	6	750-940
9.	Despatch Rider	1	950-1500
10.	Workshop Instructors and Electricians	15	1400-2600
11.	Lab. Attendant	6	950-1500
12.	Lab. Assistant	6	1200-2040
13.	Driver	1	950-1500

The expenditure involved on supporting staff would not exceed 50% expenditure on teaching posts. The summary of recurring and non-recurring expenditure involved for establishment of new Polytechnic would be as under :—

Project Cost*(Rs. in lacs)*

Item	Cost for 5 years	Remarks
Non-Recurring		
1. Building/Land cost	425.00	
2. Machinery & Equipment	60.00	
3. Van	2.00	
4. Furniture	8.00	
5. Library/Books	5.00	
Sub-Total :	<u>500.00</u>	

Recurring

1. Salaries	15.00
2. Consumables	10.00
3. Maintenance, operation etc.	5.00
Total :	<u>30.00</u>

During 1991-92, detailed survey for establishing the institution has been taken up associating expert agencies Instt. of Applied Manpower and Research. This survey shall enable the department to identify the courses, duration and detailed planning of the institution so that the institution shall be fully functional during the Eighth Five Year Plan. After receipt of the final approval by AICTE, the department shall begin certain courses during the next Annual Plan itself. Delhi Development Authority has already been approached to allot suitable land in the Papankalan Project area.

Delhi Development Authority has already been approached to allot around 7 acres of land for establishing one more Polytechnic in Papankalan Project Area coming in the Perspective Plan of Delhi. Establishing an institute in this area would justify geographical dispersal of technical institutions in Delhi and would also cater to the growing demand of technician manpower requirement of industries in hi-tech area of technologies. Due to non-allocation of suitable land by DDA in Trans-Yamuna area, the amount of Rs. 30 lacs deposited to DDA in 7th Five Year Plan is lying as reserve with them. An additional amount of about Rs. 40 lacs is required for making payment of land cost. In the Eighth Five Year Plan, it is proposed to establish this Polytechnic as a full-fledged Polytechnic in the Papankalan and the courses in emerging areas would be introduced after approval of AICTE. Provision of Rs. 85 lacs is approved in the Eighth Five Year Plan for construction of the building as per norms of AICTE. Provision of Rs. 13 lacs has been approved for the Annual Plan 1992-93.

*18. Expansion and consolidation of existing facilities of College of Pharmacy—
(Rs. 30.00 lacs)*

The college, at present, conducts the following courses :—

- (a) One year course in Diploma in Pharmacy after passing 12th of 10+2 scheme with an intake of 90 students.
- (b) Four year B. Pharma degree course with an intake of 40 students after passing 12th of 10+2 scheme.
- (c) Two year M. Pharma post-graduate course in the disciplines of Pharmaceutics, Pharmacology and Hospital Pharmacy with an intake of 5 students in each discipline and
- (d) Research facilities leading to the Ph. D. programme.

The College has so far produced four Doctorates in various disciplines of Pharmacy :—

- (i) During the 8th Five Year Plan, the College of Pharmacy proposes to augment some of the existing courses by increasing the intake of students and also plans to introduce some new courses.
- (ii) The Pharmacy Council of India proposes to change its "Education on Regulation" and the existing one year diploma in Pharmacy course after 12th class of 10+2 scheme is proposed to be made into a two year course after 12th class of 10+2 scheme. The college proposes to maintain the existing intake of 90 students in the diploma course. Once the diploma becomes a two year courses, the institution will have an additional 90 students in diploma class i.e. it will have to total 180 students in I & II year diploma in Pharmacy course. For this increased number of students, the college will have to provide additional facilities like lecture halls, machinery, equipment, additional laboratories, increased students amenities, additional teachers, supporting staff, additional facilities for them etc.
- (iii) The intake in B. Pharma is at present 40, this intake could also be increased to 60 students per year. For the increased intake, the institution will have to provide necessary additional facilities as mentioned under the diploma course.
- (iv) It is also proposed to introduce post-graduate studies i.e. M. Pharma Chemistry, Bio-Technology, Quality assurance of drugs and a new area Clinical Pharmacy (for the first time in the country) during the plan period. For these additional courses in M. Pharma teachers and facilities will have to be provided.
- (v) The construction of hostel block and Auditorium of College of Pharmacy which is a spill over scheme of 7th Five Year Plan, would be completed in, 8th Five Year Plan. It is therefore essential that necessary staff be provided for the operation of Hostel in the College in Pharmacy like Hostel Supdt. Attendants, Cook, Class IV etc. and also essential furniture and various kitchen items are required to be purchased.

Physical Targets

For the scheme envisaged above, the physical facilities, staff, Mach. & Equipment and supporting staff required are as under :—

Proposed expansion	
Annual intake	124
Teacher required	17
No. of Tech. staff	15
Number of Admn. staff	7
Number of Class-IV required	10

Non-Recurring

1. Additional Institute building : Provision reflected under capital programmes.	
2. Equipment & Books	18.50
3. Furniture only	6.50
Total	25.00

Recurring

Salary for staff	17.00
Training costs & other recurring expenses	8.50
Total	25.50
Total (Revenue)	50.50

Through this scheme it is intended to remove existing deficiencies in the staff A.R. study has been conducted. Posts of Stenographers, Library Attendant, Caretaker, Head Clerk, Class-IV and some Technical posts are to be created.

Financial Outlay

1992-97	30 lacs	1992-93	12.00 lacs
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19. *Construction of hostel building and Multi purpose hall in College of Pharmacy—(Rs. 65.00 lacs)*

College of Pharmacy has established its own campus on a 10 acre land in Pushp Vihar in South Delhi. This institute has an urgent need for setting up of hostel facilities for students. It is proposed, initially, to have hostel facilities created for 40 boys and 20 girls. Preliminary drawings for construction of hostel have been finalised by PWD. Drawing for construction of auditorium (Multi-purpose Hall) for the institution is also ready. Standing Finance Committee has accorded approval for construction of this project at an estimated cost of Rs. 85 lacs. The drawings have already been submitted to M.C.D. for approval. Provision of Rs. 65 lacs has been approved for the 8th Plan which includes Rs. 15 lacs for the Annual Plan 1992-93.

20. *Reorganisation & restructuring the set up of Polytechnics/Institute of Commercial Practice and College of Pharmacy—(Rs. 20.00 lacs)*

All India Council of Technical Education has specifically accepted the recommendations of Madan Committee regarding revised staffing pattern of Polytechnics. Ministry of Human Resource Development, Govt. of India has accorded approval for implementation of revised structure for Delhi Polytechnics Ministry of Human Resource Development, Govt. of India directed that these recommendations will be implemented in phased manner 40:40:20 in three years. During 7th Plan 40% of the scheme has been implemented. Rest of the scheme will be implemented in 8th Plan as on going scheme. It is also proposed to implement other recommendations of AICTE (Dogra Committee's recommendations etc.) during the Plan Period.

The object of the scheme is :—

- (i) To improve the standard & quality of training in the Polytechnics;
- (ii) To revitalise and motivate the faculty system to enable them to tackle the challenges posed in the evergrowing field of Technology.

The New posts required under the revised staffing pattern will be created. Promotional avenue and revised pay scale as per recommendations of Dogra Committee would also be provided to faculty members.

Staffing pattern of Boys' Polytechnic & Women's Polytechnic after 100% implementation of Madan Committee would be as under :—

	Boys' Poly.	Women's Poly.
Head of Deptt.	20	10
Sr. Lecturer/Workshop Supdt.	53	10
T. P. O.	3	1
Lecturers	222	62
Foreman Instructor	16	3

Out of this the following posts of supporting staff have already been created :—

	Boys' Poly.	Women's Poly.
Head of Deptt.	4	2
Sr. Lecturer/Workshop Superintendent	18	8
Lecturers	126	24
T. P. O.	2	1
Foreman Instructor	12	2

29 posts (16 posts in 3 Boys Polytechnics and 13 posts in Women's Polytechnic) have been abolished and 55 permanent posts have been kept in abeyance.

Similar recommendations have also been made for Institute of Commercial Practice. Govt. of India (Ministry of Human Resource Development) has accorded approval for revised structure for Institute of commercial Practice.

Approved Financial outlays :—

	(Rs. in lacs)
1992-97	1992-93
20.00	15.00

21. *Construction of staff quarters at Okhla—(Rs. 30.00 lacs)*

The Directorate of Technical Education initiated the task of providing additional residential flats in G.B. Pant Polytechnic campus in 7th Five Year Plan. Nearly 80% of the work has been completed and the remaining work will be taken up as a spill-over in the 8th Plan. The spill over expenditure would be Rs. 30.00 lacs. Out of this, provision of Rs. 20 lacs has been approved for the Annual Plan 1992-93.

22. *Integrated Environment Development Programme—(Rs. 20.00 lacs)*

Pusa campus, one of the oldest institution under this Directorate has acquired a shabby look due to lack of proper maintenance of building and its surroundings. The whole complex having a vast expense needs land scaping and facelift. This Directorate has embarked upon a scheme to achieve integrated environmental development of Pusa campus, G.B. Pant Polytechnic & College of Pharmacy. The work has been assigned to PWD and includes construction of boundary wall, raising of compound wall, development of play grounds and horticulture. Rs. 20.00 lacs have been earmarked for the project during 8th Five Year Plan. Provision of Rs. 6.00 lacs has been provided in the Annual Plan 1992-93.

23. *Introduction of new courses in emerging technology—(Rs. 30.00 lacs)*

The need for trained manpower in the new emerging areas has been recognised at the National level itself and this is applicable to the Delhi Union Territory also. Govt. of India based on the statistical data has also identified some critical areas where weaknees exists, e.g. computer science, electronics, printing technology, maintenance engineering, instrumentation etc. based on frequent demand for trained manpower.

The following areas of Technical Education are proposed to be introduced in the 8th Five Year Plan :

Sl. No.	Name of the course	Intake	Institution where proposed
1.	Diploma in Mechanical Engg. with specialisation in Maintenance Engineering	30	Ambedkar Memorial Poly.
2.	Diploma in Civil Engg. with specialisation in Construction Engg.	30	Ambedkar Memorial Poly.
3.	Diploma in Instrumentation and Control	30	Ambedkar Memorial Poly.
4.	Diploma in Public Health and Environmental Engg.	30	Kasturba Poly.
5.	Diploma in Fashion/Textile Design	30	Kasturba Poly.
6.	Diploma in Garment Fabrication Technology	30	Arya Bhatt Poly.
7.	Diploma in Pharmacy exclusively for women	40	Women's Poly.

8.	Diploma in Plastic Technology	30	G.B. Pant Poly.
9.	Advance Diploma in Industrial Engineering (Part time)	25	Arya Bhatt Poly.
10.	Advance Diploma in Printing and Packaging	25	Pusa Poly.
11.	Advance Diploma in advanced manufacturing technology	25	G.B. Pant Poly.
12.	Advance Diploma in Business Administration and Computer Application	25	Institute of Commercial Practice.

Courses proposed at serial number 1 to 8 have already been approved by AICTE for Union Territory of Delhi.

Diploma course in Instrumentation and Control, Plastic Technology, Mechanical Engg., with specialisation in Maintenance Engg., Garment Fabrication Technology and Pharmacy Course exclusively for women have been introduced in the existing institutions from the academic session 1990 & 1991. However complete infrastructure as per the norms of AICTE would be provided in the Eighth Five Year Plan. The other courses mentioned above would be introduced in the phased manner during Eighth Five Year Plan.

Financial outlays

(Rs. in lacs)

1992-97	1992-93
30.00	10.00

24. Strengthening of facilities for SC/ST—(Rs. 15.00 lacs)

There is a great need for specifically oriented educational effort for reducing disabilities of SC & ST students which cannot be removed only by the provisions for reservation. It has to be recognised that the majority of these students, often, suffer from the after-effects of childhood inadequacies and lack of confidence in realising their academic potentials. These factors often work against their adjustment in the stream of higher education professional work and their performance vis-a-vis others. So some programmes for enhancing the competence of SC/ST students have to be initiated and appropriate steps need to be taken to fully integrate these young people with the others.

This scheme has been initiated to provide increased facilities for SC/ST category students so that they can be motivated to pursue their studies without much of dependence on their parents. During the 7th Plan, suitable provision was made to arrange extra coaching after normal working hours to these students to make up the deficiencies, if any, experienced by them. It is proposed to carry over the scheme during the 8th Plan period. In addition to this, these students will be provided with books and other costlier learning aids required during studies.

To organise special coaching programme separate part-time staff will be required who will be recommended as per norms.

Around 1000 students belonging to SC/ST and other weaker sections would be given special coaching beyond/before regular classes so as to remove their difficulties by engaging part-time faculty. They would also be extended the facility of text books, tool kits, calculators etc. during the course of their studies so as to ward off their financial hardships.

Approval Financial outlays :	(Rs. in lacs)
1992-97	1992-93
15.00	4.00

25. *Strengthening of facilities for the Students—(Rs. 15.00 lacs)*

The Technical education system should not confine itself to producing only technical knowledge and skill in the students but should also strive towards physical, intellectual and aesthetic development of his personality. Under the scheme various facilities like good common room, renovation of canteen, building of auditorium purchase of water coolers, establishment of a medical room with provision of a visiting doctors, construction of a cycle/scooter shed and provision of courts and playgrounds will be provided to the students.

The objective of the scheme would be :

1. To provide adequate facilities to the students community.
2. To maintain proper congenial atmosphere in the institute.

Physical facilities in the form of required items identified by Head of the Institutions conforming to the objectives of the scheme shall be provided to the institutions in a phased manner depending on the priorities. Approved outlay for 8th Five Year Plan is Rs. 15.00 lacs which includes Rs. 4.00 lacs for Annual Plan 1992-93.

26. *Faculty Development Programme—(Rs. 5.00 lacs)*

Performance Improvement and development of staff are basic needs of an educational system. There is a continuous need of training and re-training of teachers to develop, professional, personal abilities and resourcefulness. The training needs may be identified in one or more of the following areas :

- Academic development (Theory & Practice)
- Personal development (Communication skills, interpersonal skills)
- Pedagogical development (Knowledge skills & Practice)
- Perceptual development of technician education system.
- Growing institutional needs for development and expansion
- Diversing changing values, learning styles and aspirations of students.

These development needs shall be accomplished by deputing the staff judiciously to one or more of the following programmes :

- Induction training.
- Inservice training-conferences, seminars, workshops.
- Long-term inservice training programme-academic, pedagogical.
- Attachment to Industry.
- Research or Project Work.

Under the scheme it will be obligatory for the teachers to undergo training programmes organised from time to time. Training profiles of all the teachers will be maintained indicating the area of specialisation, subjects of study, practical training received and other related information. The teachers on the basis of their profile will be identified for sponsorship to various training programmes. In addition to short-term training programmes and practical training, teachers will be encouraged to acquire higher qualifications through long-term continuing education programmes. The teachers will, under the scheme, be able to attend conferences and seminars on topics related to their field which will provide them good opportunity to keep themselves abreast with the latest advances in technologies and know-how. Funds need to be earmarked towards sponsoring/nomination fee payable to organising agencies.

Teachers who will be required to undergo long term programmes for improving their qualifications will have to be provided training reserves so that teaching work in the institutions does not suffer. Leave and training reserve to the extent of 10% of the total sanctioned staff will have to be provided in each institution.

Government of India, Ministry of Human Resource Development under its quality improvement programme for technical teachers of engineering colleges provides for additional grant over and above the full salary to the teacher deputed for further studies to meet other contingent expenses. However, this scheme is not applicable to polytechnic teachers. It is proposed to extend such benefits to teachers of polytechnics who are deputed to pursue higher studies. As an incentive to the polytechnic teachers and the staff working in the H.Q. it is proposed to introduced awards to the best outstanding workers as per the analogy of the ITI staff.

Physical Targets

The following training programmes for faculty development are proposed during 8th Five Year Plan per annum :

1. Deputation of staff for various training programmes arranged by T.T.T.I. including non-teaching staff	200
2. Deputation of staff to undergo short-term courses intensive courses/workshops in industries	20
3. Deputation of staff to undergo part time B. E. programme	5
4. Deputation of staff to undergo M. E. programme	5
5. Deputation of staff for Ph. D. programme	2
6. Deputation of administrative staff to courses organised by central and state governments	10
7. Deputation of staff for foreign training/study tour	5

	<i>Rs. in lacs</i>
Financial Outlay	
1. For conferences, seminars & workshops etc. Recurring Expenditure	1.00
2. For leave & training reserves Recurring Expenditure	5.00
3. For Practical Training in Industry Recurring Expenditure	1.00
4. For stipend to teachers pursuing higher education Recurring Expenditure	2.00
	<hr/>
Total Recurring Expenditure	9.00
	<hr/>
5. Other Contingency Expenditure (Non-Recurring) (office furniture & amenities for faculty members)	1.00
	<hr/>
Total	10.00
	<hr/>

Approved outlay

1992-97

5.00

(Rs. in lacs)

1992-93

3.00

27. *Stepping up Industry—Institute Interaction—(Rs. 8.00 lacs)*

Interaction between engineering institutions and industry is one important objective as laid down in the new policy on education, 1986 of Govt. of India. At present the technical institutions and industry work in isolation and the linkage is not so strong as it should be. An ideal situation would be that where a technical institution is attached to an industry in the same way as a medical college is attached to a hospital. However, close interaction between institutions and industry can be effectively brought about. A meaningful collaboration can be beneficial both for the institutions and the industry.

The following activities to some extent are being undertaken where some sort of interaction between industry and institute exists :—

1. Arranging industrial visits for students.
2. Industries contacting institutes for recruitment.
3. Teachers deputed for QIP in industry.
4. Inviting people from the field for guest lectures.
5. Industrial/inplant training of students.

The interaction between industry and institute cannot take place until and unless concrete efforts are made in that direction. The existing interaction needs to be enhanced and extended to widen its perimeter. Various collaborative activities that can be initiated and constraints visualized are identified as under :—

1. *Exchange of staff* :—Executives and Engineers from industry can be invited to work as guest faculty in the institutions. They can deliver lectures on specialised topics and can associate with the faculty of the institute for accomplishing certain research projects assigned to the students. They can undertake certain projects in the institute. Similarly staff from the institute can spend some time during vacations or for further period in the industry to work in collaboration with the staff there, so that knowledge could be shared to achieve certain tasks.

2. *Consultancy offered by Institutions* :—Under this activity the institutions can provide consultancy to the industry with the expertise available in the institutions. The institutions can help solve the problems encountered by the industry. The faculty can advise regarding manpower requirement, quality control process control, layouts etc. and can undertake research projects. An effective partnership between the faculty of institution and industry can provide an environment which will promote innovations. Faculty has creative ideas and knowledge reservoirs whereas industry has resources and means to put ideas into practical shapes.

3. *Practical Training* :—It is important that theoretical knowledge is supplemented by practical experience. The students must be exposed to real life situations and the industrial culture. Students must be able to correlate theoretical knowledge with practical applications. At present this is being done through short stints of practical training in industry during vacations. This training is hardly adequate and more time should be devoted. The curriculum should provide sufficient time and weightage for practical training. There should atleast be one semester reserved for such training. The industry will have to be liberal in allowing the students to receive training for long periods. The industry can involve students in solving its problem, and assigning them certain functions to be carried out in the industry. Such training if not properly monitored or supervised will loose the effectiveness and would not serve the desired purpose. So it is essential that some staff members are also associated with it.

4. *Training for Technical Personnel* :—The institutes can devise and conduct short term training programmes and continuing education programmes for technical personnel of industry to enhance their knowledge and thus improve carrer prospects. Multi-entry and credit system having modules of study can be very successful for such people.

5. *Feed back on curriculum and training needs* :—Industry can give valuable feedback to the institution regarding the shortcomings and gaps noticed in the students during their performance in the industry. The students lacking in certain theoretical or practical aspects of study at the institute can be reflected in the feed back given to the institutes so that suitable modifications can be incorporated in the curriculum.

- (a) Separate cell at the Directorate of Technical Education shall be created for planning and execution of activities falling under the ambit of the scheme.

- (b) There is a need for establishing a committee consisting of representatives of Governments, institutions and industries which will lay-down guidelines, formulate policies and give advice on issues relating to industry institute collaboration.
- (c) Necessary infrastructural facilities shall be created in the institute to co-ordinate such activities.
- (d) A system shall be evolved to clearly earmark the proportions of finance that will go to the institute and to the individual for consultancy offered.
- (e) Administrative hurdles and rules and regulations regarding acceptance of consultancy fees will be sorted out. For accepting production work a system of estimates, evaluation of cost and proper accounting will have to be evolved.
- (f) Enterprenuership Development Wing shall be established in the institutions which will conduct programme to train the interested people in establishing their own industrial units. The faculty can provide the necessary knowledge and guidelines and help in making viable project reports.
- (g) The institutes shall create infrastructure to conduct on regular basis refresher courses, short-term training programmes capsule of courses for technical personnel working in the industry by suitably designing need-based programmes.
- (h) The curriculum development cell would develop a mechanism together feed back from industry regarding improvements required in the curriculum and training of the students. Instructional resource material can also be accordingly developed. The following posts are needed :—

1. Asstt. Director	1	3000-4500
2. Project Officer	1	2200-4000
3. Head Clerk	1	1400-2300
4. L.D.C.	2	950-1500
5. Class-IV	1	750-940
6. Driver	1	950-1500

Apart from above staff at Head Quarter one person at the typewriter, duplicating machine, one van need to be provided to this cell for performing the jobs as mentioned above.

Approved Financial outlay :—
1992-97

(Rs. in lacs)
1992-93

8.00

2.00

28. *Renovation of Labs. & Workshops of existing Polytechnics—(Rs. 50 lacs)*

For maintaining the Govt. technical institutions functioning under the Directorate, additions, and alterations are required in various labs, workshops and class rooms & improvement of other core facilities. Raising of boundary walls, providing generating sets, compound lights, establishments of computer labs, installation of new equipment and machinery, development of play grounds, construction of mini stadia air conditioning of labs construction of cycle stand, scooter and bus garage, improvement of drainage system, improvement of canteen and hostel facilities etc., are the various items of works required to be undertaken in the 8th Five Year Plan. Provision of Rs. 50 lacs has been approved for this work. Out of this provision of Rs. 25.00 lacs has been provided for the Annual Plan 1992-93.

29. *Grant-in-aid to private recognised Technical Institutes—(Rs. 20 lacs)*

In the Union Territory of Delhi, besides eight diploma level Government Institutions, ten privately managed/autonomous technical institutes provisionally affiliated to Board of Technical Education, Delhi are also functioning. The course managed by private and autonomous institutes and affiliated to Boards of Technical Education are as under :—

1. **Sarda Sukil School of Art :**

Courses

Sanctioned Intake

- | | |
|--|----|
| (i) Diploma in Commercial Art (P/T)
(one year duration) | 20 |
| (ii) Diploma in Art or Drawing Teachers | 20 |

2. **Tool Room & Training Centre :**

Wazirpur Industrial Area, Delhi

- | | |
|---|----|
| (i) Diploma in Tool & Die Making | 30 |
| (ii) Post diploma in computer Application | 15 |

3. **Food Craft Institutes, Lajpat Nagar, New Delhi.**

- | | |
|---|----|
| (i) Trade diploma in Cookery | 24 |
| (ii) Trade diploma in Bakery & Confectionary | 24 |
| (iii) Trade diploma in Hotel reception & Book keeping | 24 |
| (iv) Trade diploma in Restaurant & Counter Service | 24 |
| (v) Trade diploma in House keeping. | 24 |
| (vi) Trade diploma in Canning & Food preservation | 24 |

4. **Prototype Development & Training Centre**

- | | |
|--|----|
| (i) Post diploma in Computer Application | 30 |
|--|----|

5. **New Delhi Polytechnic for Women, Lajpat Nagar, New Delhi**

- | | |
|---|----|
| (i) Diploma in Textile Design (Weaving) | 38 |
| (ii) Diploma in Textile Design (Printing) | 38 |
| (iii) Diploma in Interior Design | 38 |

(iv) Diploma in Commercial Art	38
(v) Diploma in Beauty Culture	38
(vi) Diploma in Secretarial Practice (English)	38
6. International Polytechnic for Women, South Extension, New Delhi.	
(i) Diploma in Textile Design (Printing)	30
7. Bhartiya Vidya Bhawan	
(i) Diploma in Art for Drawing Teachers	30
B. Maharaja Surajmal Institute of Technology, C-4 Janakpuri, New Delhi	
(i) Diploma in Civil Engineering	60
(ii) Diploma in Electronics & Electrical Communication	49
(iii) Diploma in Pharmacy	60
9. Chotto Ram Rural Institute & Technology, Kanjhawala, Delhi	
(i) Diploma in Civil Engineering	60
(ii) Diploma in Architecture Assistantship	30
(iii) Electronics & Electrical Communication	60
10. Delhi Productivity Council	
(i) Post diploma in Business Administration	38

Out of above, grant-in-aid to only one Institution, namely, Sarda Ukil School of Art is being provided by Delhi Administration Since 1973.

Grant is released to Sarda Ukil School of Art as per grant-in-aid rules framed by Ministry of Human Resource Development, Government of India as per rules 95% grant for recurring expenditure and 50% grant for non-recurring expenditure is being released to Sarda Ukil School of Art. Delhi Administration has also provided land to Sarda Ukil School of Art for construction of school building at East of Kailash but the management has not constructed the building so far. Presently, there is dispute in the management committee, two rival groups are claiming the management of school. Delhi Administration has not recognised any one of them and referred the case for legal advise to Additional Solicitor General. If the Institute is taken over by Delhi Administration, the construction of building would be completed in 8th Plan period and the Institute would be shifted to its premises. Also there is need to strengthen the Sarda Ukil School of Art by providing adequate training material, and equipments. Further, it is possible that other institutions may approach for grant-in-aid to strengthen their institutions, After the enactment of AICTE act, it is the responsibility of the State Government to ensure the standards of Technical Education in their respective states/union territory's. No society or private body is now allowed to open any institutions or start new courses without the recommendations of this Directorate and approval of AICTE. Thus the objective of the scheme is to enlist the cooperation of the Private institutions in developing the Technical Education programmes in a big way.

It is proposed to provide recurring and non-recurring grant to Sarda Ukil School of Art and to other private recognised institutions for quality improvement.

Approved Financial Outlay :

Recurring	12.00 lacs
Non-recurring	8.00 lacs
1992-97	20.00 lacs
1992-93	5.00 lacs

II. DELHI COLLEGE OF ENGINEERING

1. Constructions of New Buildings for Delhi College of Engineering at Bawana Road—(Rs 4400 lacs)

Delhi College of Engineering completed 50 years of its service to nation-building in February, 1991. Shifting of the College to its new site at Bawana Road has come to coincide with 50 years of its existence, and, thus, the campus planning is to take into its stride projection of the educational facility in Delhi in general and of the College in particular for atleast the next 50 years of its functioning.

During the VII Plan period, the plot of land has been duly developed and the boundary wall has been constructed. On 23rd May, 1989, the Hon'ble Vice-President of India laid down the Foundation stone in the new campus heralding the actual construction activity. Accordingly, as on date, work has been awarded for the construction of 60 Type-I, 105 Type-II, 45 Type-III, 60 Type-IV, 56 Type-V quarters and also the construction of Guest House and Married students Hostel. 38 detailed drawings of the institutional Complex consisting of the Computer Centre, the Library Block, Administrative Block and 5 Typical Teaching Blocks have been submitted to the local bodies for approval. The construction of internal road network has also been almost completed. The landscaping of the entire campus is being given finishing touches. The notice inviting tender for the award of the work of storm water drainage system for the entire campus is being finalized. Application has been submitted to Delhi Electric Supply Undertaking for supplying 6 MVA power in the new campus.

In addition to the Institutional Complex and residences of students and staff, the new campus provides for general facilities like Gymnasium, Swimming Pool. Open Air Theatre, Health Centre, Student Activity Centre, Nursery School, Stadium and Play Fields. In the address delivered by the Hon'ble Vice-President of India on 23rd May, 1989, while laying the Foundation Stone in the new campus, he mentioned that the villagers who parted with their agricultural land for the construction of the new campus should be kept in mind and facilities of learning for the local children to the extent possible should be provided for in the new campus. Thus, many of these general facilities like Nursery School. Play Fields, Open Air Theatre etc. can be made available in a limited scale to the local population. The new campus also provides for a Commercial Complex and a Community Centre. This facility also can be thrown open to the local population in a limited scale till such time the neighbourhood of the new campus is properly developed.

A campus having a student population of 2800 and almost an equal number consisting of teachers, staff and their families, definitely requires provision of a health

centre in the form of a 20 bed hospital and an adjoining dispensary. General medical facilities around the new campus near Badli Railway Station do not exist at present and that makes all the more necessary to provide this facility right from the beginning of the campus development.

From time to time, Delhi College of Engineering receives visiting Professors from abroad through Fulbright fellowship schemes, NSF/CSIR exchange programme etc. Guest house facilities for such visiting Professors do not exist in the present campus and the college is wholly dependent upon the courtesy of U.S. Education Foundation in India, C.S.I.R. etc. for such accommodations. This draw back must be remedied in the new campus by providing a decent, air-conditioned guest house with adequate facilities for food and recreational avenues.

In the new campus, three floors of the library complex are proposed to be provided with Central air-conditioning facility on the basis of 16 hours a day. In the present campus, air-conditioning facility in the library is absent which has proved to be a great handicap in the proper utilization of library facilities including the up-keep of books and journals. In addition, in the years to come, library facilities are proposed to be substantially augmented with the introduction of micro-filming and other associated facilities.

A computer centre on modern lines is a must in the new campus of the college. The college already possesses HP 9000, ICIM 6000 Computer systems in addition to a host of PC/XTs and PC/ATs. Facilities of local area net working and terminal emulation are being developed in the present campus itself besides facilities of colour graphic display, laser printer, X-Y Plotter, dot matrix printer, line printer etc. In the new campus, computer facilities are proposed to be further augmented such that the same can adequately meet the demands of students, teachers and the industry. The computer centre must be centrally air-conditioned on the basis of 24 hours a day for the optimum use of installed facilities.

The college auditorium in the present campus serves as the venue of degree distribution function all India student Seminar. Freshers Welcome function, inauguration of technical seminars, Inauguration of students Cultural festivals etc. Many dignitaries participate on such occasions. In the present campus, the auditorium is not air-conditioned which is a draw backs and should be rectified in the new campus by providing central air-conditioning facility for the auditorium.

The aspect of operation and maintenance for such installed facilities are quite often forgotten and create problems of day-to-day functioning at a later date. Thus, it is suggested that the operation and maintenance staff of central Air-conditioning plants Computer Hardware, EPABX and Dish Antenna systems are provided as revenue expenditure right from the planning stage. This, in general, should be true for staff of Electrical Sub-station, Pump Houses, Plumbing services etc.

It has been experienced in the past that for speedy coordination/monitoring full-time personnel under the charge of the Delhi College of Engineering are essential. Accordingly, the following personnel are proposed for this big project. In fact, these

personnel would be required after the completion of the project also to take care of this large estate :—

1. Project Co-ordinator	1	3700-5700
2. Project Facilitator	2	2200-4000
3. Typist (English)	1	950-1500
4. Jeep Driver	1	950-1500

One post of Project Officer was created in the scale of Rs. 3000-4500. Keeping in view the enormous responsibilities and work it is proposed that the post be upgraded to level of Asst. Prof. with designation of Project Co-ordinator.

Physical Target

1992-97	1992-93
Construction of buildings at Bawana Road to be completed. Shifting of the college from Kashmere Gate to new campus at Bawana Road also to be completed.	Construction of residential zone to be completed. Construction of institutional complex to be continued.

Financial Outlays

The EFC Memorandum amounting to Rs. 2699.80 lacs was approved in 1985 which has now been updated and revised cost of the project is Rs. 7019.92 lacs which is being processed for submission and approval of the competent authority. An amount of Rs. 165.80 lacs had already been spent on the cost of land during the VII Plan. Upto March, 1990, an additional amount of Rs. 234.20 lacs has been spent on the various works mentioned above. The financial outlays as indicated in the updated and revised EFC memo are indicated below :

1992-97	1992-93
Recurring (Revenue)	
Rs. 150.00 lacs	17.00
Non-recurring (Capital)	
Rs. 4250.00 lacs	803.00 (voted) 50.00 (charged)

Summary of Plan Outlays

- (a) *Establishment*:—The establishment charges for the project essentially consist of the salary and allowances of project co-ordination team, office expenses including telephone connections for the same, the cost of a Jeep and room cooler and other miscellaneous items. The total expenditure during 1992-97 as indicated in the updated and revised EFC memo works out to be Rs. 38.27 lacs.

- (b) *Building*—The construction of buildings namely academic complex, staff residences, student residences, Health centre, Electric sub-stations etc. constitute the primary items of the project and the total expenditure during 1992-97 as indicated in the updated and revised EFC memo works out to be Rs. 5595.71 lacs.
- (c) *Machinery and Equipment*—All the existing plant and machinery in the old campus of the college at Kashmere Gate would be shifted at the new campus at Bawana Road and therefore the cost on account of machinery and equipment is not large. However it may be mentioned that a sum of Rs. 250.29 lacs have been earmarked for the purchase of lifts, Central Air-conditioning plant, Stand-by diesel Generator, Uninterruptible Power Supply etc. during the period 1992-97 since these plants and machinery do not exist in the old campus. Accordingly, the above mentioned cost of plant and machinery has been incorporated in the updated and revised EFC memo.
- (d) *Land Component*—It has been mentioned earlier that the total cost of the land for the new campus was Rs. 165.80 lacs and the same was spent during the VII Plan. Thus during 1992-97 the cost of land component is very small. Around Rs. 50.00 lacs may be required as “charged” expenditure under the Head Capital Expenditure to meet the requirements of compensation to be paid to land owners as per the directions of the competent authority.
- (e) *Others*—For dismantling the plant, equipment, furniture etc. from the old campus at Kashmere Gate and transporting them and installing them in the new campus at Bawana Road would involve expenditure. A sum of Rs. 63.65 lacs has been incorporated in the updated and revised EFC memo for this purpose. Additionally, a sum of Rs. 100.00 lacs has been incorporated in the updated and revised EFC memo for the induction of the maintenance team consisting of Civil maintenance, Electrical maintenance and Horticulture in the new campus during the period 1992-97, since the various residences in the new campus would become operational during the middle of the VIII Plan period and also the various plantations in the new campus are to be regularly taken care of. The rest of the expenditure is due to Civil and Electrical bulk services, namely providing drinking water supply, storm water sewerage system, installation of Electrical Sub-stations, providing street lighting and also for providing the necessary expenditure for landscaping.

For various reasons, the Project of shifting the college in the new campus could not be completed during the VII Plan. However, an all out efforts is to be made now, such that the project is definitely completed by March 1997. The total approved outlay during 1992-1997 is Rs. 4350 lacs. The approved outlay during 1992-93 is Rs. 820.00 lacs (Revenue Rs. 17.00 lacs and Capital Rs. 803.00 lacs).

Modernisation of Existing Courses—(Rs. 300 lacs)

Great emphasis has been given on modernisation and removal of obsolescence in the national policy on technical education. The College, being old, naturally has

some equipment which are old and out-dated, and call for replacement by new and sophisticated machines and equipment such that the students gain hands on experience on the modern machines and equipment that they have to deal with in their professional career. Secondly, the national policy on education calls for deployment of various educational technology tools for more effective and efficient teaching-learning process. Such educational technology tools need to be procured, in addition to micro-filming and other modern systems of information retrieval from the library. Another very important aspect is training of technical supporting staff in handling such sophisticated equipment in workshops, laboratories, drawing offices etc. Provision, therefore, is being made for the expenditure involved in training technical supporting staff and also for the procurement of latest books and journals. A 20 seater mini bus would be very much useful from the point of view of mobility of personnel in actually arranging special training to the staff in the use of sophisticated machinery and equipment by National Physical Laboratory, Central Water Commission, National Thermal Power Corporation, and other knowledgeable industries located around Delhi. Accordingly, the posts of a vehicle driver and a cleaner are being proposed during 1992-97 Plan as indicated below :—

1. Driver	1	950-1500
2. Cleaner	1	750-940
	Total	2 Posts

Physical Target

1992-97	1992-93
2 posts to be created, machinery procured and installed in the new campus of the College, training of 30 technical staff to be arranged.	Machinery, books and journals to be purchased.

Summary of Plan Outlays

- (a) Establishment—The expenditure under establishment is quite nominal during 1992-97 and the same is estimated to be Rs. 1.00 lac.
- (b) Machinery and Equipment—A sum of Rs. 294.00 lacs is proposed during the period 1992-97 for the purchase of sophisticated equipment, educational technology tools, micro-filming and other modern information retrieval systems, a 20-seater mini bus in addition to latest books and journals.
- (c) Others—An expenditure of Rs. 5.00 lacs during the period 1992-97 is contemplated for technical supporting staff training expenses, running cost of vehicle, and other miscellaneous items.

An outlay of Rs. 300 lacs is approved for this scheme for the 8th Plan which includes Rs. 50 lacs for the Annual Plan 1992-93.

This scheme has taken into account modernisation of workshops and laboratories, induction of educational technology tools for effective and efficient teaching-learning process and also updating the skills and training of technical supporting staff.

3. Faculty Development—(Rs. 30 lacs)

Great emphasis has been given on staff development in national educational policy. The AICTE scales of pay at par with the recommendations of the Dogra commission have been implemented in the College which provides for book grant to the extent of Rs. 1,000/- per year per teacher. The same also provides for meeting expenses of attending national seminars for every teacher once in a year, and also attending international seminar/conference for every teacher once every three years. Additionally, the AICTE scales of pay provides for subscription grant for every teacher to various professional societies/institutions. All these activities involve expenditure, the details of which are indicated below :

Physical Target

1992-97	1992-93
Atleast 160 teachers expected to be benefitted.	About 50 teachers to be benefitted.

Financial Outlays

(Rs. in lacs)	
1992-97	1992-93
30.00	7.00

4. Student Welfare—(Rs. 10.00 lacs)

Under this scheme, better amenities are provided in the boys common room, girls common room, hostel common rooms, hostel mess, college canteen etc. Due to increase in student population in the campus over the years, there is a shortfall in student amenities in the campus at present; and it is proposed to augment the same during the 1992-97 Plan as indicated below :

Financial Outlays

(Rs. in lacs)	
1992-97	1992-93
10.00	2.00

5. Creation of Centres of Advanced Studies, Research, Extension Services— (Rs. 76 lacs)

- (a) Centre of advanced Studies & Research in Polymer Science and Technology (Rs. 7.00 lacs) : The specific problems proposed to be studied in depth by this centre are as follows :

Polymers from renewable sources, polymeric alloys, speciality polymers and development of polymer processing.

Polymers from renewable sources offer a challenging method of using some of the raw materials of the country, such as castor oil and Cashew nut shell liquid for the production of polymers of a number of grades. It seems also desirable to develop speciality polymers, such as, Sealants. High temperature polymers and organic superconductors, which may not be required in very large quantities but some of which can be very critical for many projects. The rheological properties of polymers and their behaviour during processing need to be studied in depth.

The following personnel would be required to man this centre :

1. Professor	1	4500-7300
2. Asstt. Professor	1	3700-5700
3. Senior Research Fellow	1	3000-5000
4. Junior Research Fellow	1	2200-4000
5. Senior Technical Assistant	1	1640-2900
6. Steno Typist	1	1200-2040
7. Cleaner	1	750-940

Physical Target

1992-97	1992-93
To create all the 7 posts and establish the centre.	Nil

Financial Outlays

1992-97 (Rs. in lacs)	1992-93
7.00	Nil

Summary of Plan Outlay

- (a) Establishment—The expenditure on account of establishment during 1992-97 works out to be Rs. 1.50 lacs, since it is proposed to start the centre in the year 1996-97.
- (b) Machinery and Equipment—The total expenditure during 1992-97 would be around Rs. 5.00 lacs for the purchase of specialized machinery and equipment required for the centre. However, this expenditure would be non-recurring in nature.
- (c) Others—An expenditure of Rs. 0.50 lac is provided during the period 1992-97 for various miscellaneous items which will be recurring in nature,
- (b) *Centre of Advance Studies & Research in Environmental Engineering—(Rs. 8 lacs)*

Population growth and rapid developments in Industrial and Utility Sectors have created a serious problem of Environmental Pollution in our Country. The need for studies and research in this emerging area can not therefore be over emphasised.

Delhi College of Engineering has introduced Environmental Engineering as a post-graduate Programme since 1973. A large number of post-graduates with specialization in Environmental Engineering has come out from this institute and are occupying important positions in Govt., Semi-Govt. and Private Organizations India and abroad. The College has three laboratories mainly catering to the needs of Environmental Engineering. One is meant for Under-graduate students, one for post-graduate students housing sophisticated instruments and the third a semi-open complex, where the post-graduate students perform various indoor and outdoor experiments. The students are mainly engaged in meaningful field research and every year innovative methods of pollution control are presented in the form of M.E. Thesis

work. About 12 works all new, were carried out with Water Hyacinth alone. A couple of them are receiving field trials in full scale plants with encouraging results. Similarly, two works were completed on fluidised bed techniques. On Tubular Aeration Technique, one work has been completed and a couple of other innovations are going on. A number of Ph. D. research works are in progress for evolving an optimised technique of Physico-Chemical-Biological combine system of waste water treatment.

With the above background it is most appropriate to open a centre for Environmental Engg. with special emphasis on Pollution Control in the Delhi College of Engineering during the VIII Five Year Plan period. The Manpower requirement for the Cell is indicated below :—

1. Professor	1	4500-7300
2. Asstt. Professor	1	3700-5700
3. Lecturer	1	2200-4000
4. Senior Technical Assistant	1	1640-2900
5. Technical Assistant	1	1400-2600
6. Steno Typist	1	1200-2040
7. Cleaner	1	750-940

Physical Target

	1992-97	1992-93
To create all the 4 posts and procure the machinery required. To perform literature survey and work out action plan. Also to locate the Cell in the new accommodation at the new campus site of the College.		Nil

Financial Outlays

	1992-97 (Rs. in lacs)	1992-93
	8.00	Nil

Summary of Plan Outlays

- Establishment—The expenditure under establishment during 1992-97 works out to be Rs. 4.00 lacs. It is proposed to start the cell with effect from 1993-94.
- Machinery and Equipment—An amount of Rs. 3.00 lacs has been provided during 1992-97 for the purchase of specialized equipment required for the Cell. However, this expenditure would be non-recurring in nature.
- Others—An expenditure of Rs. 1 lac during the period 1992-97 is contemplated for miscellaneous expenditure on consumables, books journals etc.

(c) *Instrumentation Design & Development Centre—(Rs 5 lacs)*

The college is at present having 6 engineering departments, namely, Electrical, Computer, Mechanical, Civil, Electronics & Communication, and Production &

Industrial Engineering. The labs in all these departments are having sophisticated instruments which need constant maintenance and also development wherever necessary. At present the Electrical Engg. department is running one B. E. Electrical Engg. course in which instrumentation is one compulsory course. Also there is one course on instrumentation in B.E. Mechanical Engg. course. One full-fledged M.E. course in Control & Instrumentation is run in the Electrical Engg. department. The instrument design and development centre now proposed will further strengthen the area of instrumentation.

The Centre which is of an inter-disciplinary nature will help in achieving the following objectives :—

- (i) To repair and maintain the sophisticated instruments in the various departments of the college and thus save considerable expenditure and delay otherwise incurred in repairs. It will enhance the utilization of the instruments,
- (ii) To organize short-term courses for the engineers in industry in the area of instrument design.
- (iii) To develop instruments associated with latest technologies like Numeric Control and Robotics.
- (iv) To take up sponsored projects from Public Sector and Private Organisations as well as to take up consultancy work.

The following personnel would be required to man this Centre :—

1. Professor	1	4500-7300
2. Asstt. Professor	1	3700-5700
3. Design Engineer	2	2200-4000
4. Senior Technical Asstt.	1	1640-2900
5. Technical Asstt.	2	1400-2600
6. Steno Typist	1	1200-2040
7. Cleaner	2	750-940

Physical Target

1992-97	1992-93
To create all the 8 posts, plan and procure machinery. Start initial work and shift the centre to the permanent accommodation at the new campus site of the College.	Nil

Financial Outlays

1992-97	1992-93
(Rs. in lacs) 5.00	Nil

Summary of Plan Outlays

- (a) Establishment—The expenditure under establishment during 1992-97 works out to be Rs. 2 lacs. It is intended to recruit the Chief Design Engineer and one Junior Research Fellow to start with. They will plan the entire set-up to be subsequently executed by the Centre as a whole.
- (b) Machinery and Equipment—The expenditure on account of machinery and equipment during 1992-97 would be Rs. 2.05 lacs. However, this expenditure would be non-recurring in nature.
- (c) Others—An expenditure of Rs. 0.50 lac during the period 1992-97 is contemplated for miscellaneous expenditure like consumables, books, journals etc.
- (d) *Centre of Appropriate Technology, Continuing Education & Extension Services—(Rs. 10 lacs)*

The proposed Centre which will be primarily engaged in development of appropriate technology for the society at large will provide an opportunity to the students to see, feel and work for the real life problems facing the community in and around him, so that they develop an urge to serve the society in their career ahead. It will draw the expertise available in the various departments of the Institution and also from outside organisation involved in such problems. It will co-ordinate the activities of various departments for practical applications.

Activities of the Centre

- (i) Survey, Collection, Compilation, Storage, updating and analysis of field data.
- (ii) Development of appropriate technology for solution of field problems in economic and efficient manner in collaboration with various field organizations/Engg departments.
- (iii) Offer field problems with field data for project works of B.E./M.E students as part of their assignments.
- (iv) Offer short term refresher courses for field engineers in collaboration with the various engineering departments/Govt., Semi-Govt. and Private Organizations dealing with the specific subject of the courses to be offered—as part of continuing education programme.
- (v) Take up applied research in areas related to environment, habitat, Water & Sanitation & Transportation or in inter disciplinary fields involving two or more of the disciplines & feed the various sections of the deptt.
- (vi) Maintain liaison between the field organisation dealing with the areas mentioned above and the various departments of the Engineering Faculty.
- (vii) Hold exhibitions displaying the achievements of the Centre and educating the public of the developments.
- (viii) Liaison for development of courses/syllabus in collaboration with departments.

The following personnel would be required for the various activities of this centre :

1. Professor	1	4500-7300
2. Asstt. Professor	2	3700-5700
3. Steno Typist with knowledge of world processing	1	1400-2400
4. Sr. Technical Assistant	1	1640-2900
5. Technical Assistant	2	1400-2600
6. Van Driver	1	950-1500
7. Daftari	1	775-1025
8. Peon	1	750-940

Physical Target

1992-97

1992-93

Creation of all the 10 posts to be completed. To offer several short term courses to interested parties in the areas mentioned above. To identify the areas of extension services required by various agencies in the related areas. To finally locate the centre at the new campus of the College.

To start offering short-term courses under non-degree programmes. To continue up-dating data base and plan a work schedule.

Financial Outlays

1992-97

1992-93

(Rs. in lacs)
10.00

2.50

Summary of Plan Outlays

- Establishment—The expenditure on establishment during 1992-97 works out to be Rs. 2.50 lacs. The Centre will start functioning in the College at the existing labs. of Civil Engineering Department. The post of Van Driver has been created on 26-7-1990. One Matador Van was purchased earlier and the same is in good working condition.
- Machinery and Equipments—An amount of Rs. 6.00 lacs during 1992-97 has been provided for the purchase of various equipment required, like, Personal Computer with Printer, Plain Paper Copier, Cyclostyling Machine, Overhead Projector, Slide Projector etc.
- Others—For the duration 1992-97, a sum of Rs. 1.50 lacs is provided for Miscellaneous sundry expenditure involved with consumables, running cost of vehicles, stationery charges, travel expenses etc.

(e) *Centre for Industrial Tribology, Maintenance Engineering & Management (CITMEM)—(Rs. 10 lacs)*

Dte. of Technical Education proposes to set up a centre for Industrial Tribology Maintenance Engineering and Management (CITMEM).

CITMEM aims at focussing attention on the R & D and manpower development in the following areas :

1. Maintenance strategies for Mechanical, Electrical, Electronics measuring and recording equipments :—
2. Maintenance through tribology which includes proper design and maintenance of bearings, CAD, Equipment failure analysis, preventive maintenance, Diagnostic maintenance, Vibration Monitoring, Friction and wear studies of machinery/equipment, such as, I.C. Engines, Compressors, Boilers, Motors, Video/Audio tapes, Textile Machinery, Power Plant etc. Proper selection of lubricants, Material-lubricant compatibility etc.
3. Maintenance cost reduction, planning and control, scheduling maintenance information systems including maintenance computerisation, Management of maintenance inventory; Application of PERT/CPM, operation research techniques in maintenance, Equipment utilization and replacement, Terotechnology and Tribo-terotechnology etc.

This Centre will be able to provide service to Industry and is expected to augment the resources.

The following personnel will be required to man this centre :—

1. Professor	1	4500-7300
2. Assistant Professor	2	3700-5700
3. Maintenance Engineer	2	2200-4000
4. Senior Technical Assistant	2	1640-2900
5. Technical Assistant	2	1400-2600
6. Typist (English)	1	1200-2040
7. Cleaners	2	750-940

Physical Target

1992-97	1992-93
Creation of all the 11 posts to be completed. The processes of equipment selection and purchase also to be completed. Work planning and installing the Centre at the new campus site of the College also to be completed.	Nil

Financial Outlays

1992-97
(Rs. in lacs)
10.00

1992-93

Nil

Summary of Plan Outlays

- (a) Establishment—The total expenditure under establishment during 1992-97 works out to be Rs. 7.00 lacs.
- (b) Machinery and Equipment—Specialized equipment like Lubricant testing machine, Scanning electron microscope, Vibration and signature analysis measuring instruments, Particle counter, Surface coating unit, Personal computers, Electronic weighing machine etc. would be required for the various activities of this Centre. An expenditure of Rs. 2.00 lacs has been provided for the purpose during 1992-97.
- (c) Others—An expenditure of Rs. 1.00 lacs during the period 1992-97 is contemplated for books, consumables etc.
- (f) *Centre for Production systems, Automation and Robotics Engineering—(Rs. 10 lacs)*
The Centre will be engaged in the following activities :—
1. Dissemination of information in CAD/CAM, CIMS etc.
 2. Design and development of specific micro-processor controls for industrial processes.
 3. Develop software for industrial services.
 4. Take up application of robots in specific areas.
 5. Engage in research in the field of AI, Pattern Recognition etc.
 6. Arranging short-term courses for training industrial personnel.

The Centre should be able to augment some of its expenditure from the services rendered to the industry.

The following personnel would be required to man this Centre:

1. Professor	1	4500-7300
2. Asstt. Professor	2	3700-5700
3. Design Engineer	4	2200-4000
4. Senior Technical Asstt.	2	1640-2900
5. Technical Asstt.	2	1400-2600
6. Steno Typist	1	1200-2040
7. Cleaner	2	750-940

Physical Target

1992-97

1992-93

Creation of all the 15 posts to be completed. Procurement of machinery required and detailed planning of the work to be undertaken in the first instance are also to be completed. Shifting of the Centre to the new campus site of the College to be completed.

Nil

Financial Outlays

1992-97 (Rs. in lacs)	1992-93
10.00	Nil

Summary of Plan Outlays

- (a) **Establishment**—The total expenditure under establishment during 1992-97 works out to be Rs. 5.00 lacs.
- (b) **Machinery and Equipment**—Specialized equipment like Industrial robots, Cameras, Force sensing equipments, Cameras etc. would be required for the Centre. A sum of Rs. 4.00 lacs during the period 1992-97 has been provided for procuring these equipment.
- (c) **Others**—An expenditure of Rs. 1.00 lac during the period 1992-97 is contemplated for books, consumables, travel etc.
- (g) *Advanced Centre for Development and Applications of Superconductivity.*
—(Rs. 10 lacs)

The Centre will be primarily engaged in the following activities :—

1. To develop technologies for the use of superconductors in Electromagnets, Generators, Motors etc.
2. To develop energy storage system using conventional and high critical temperature superconductors.
3. To develop microwave antenna and circuits using conventional and high critical temperature superconductors.

It is expected that these activities will lead to reduced sizes of the equipment and reduction in cost. The development of electric storage system in particular has shown high promise. Electric energy can be stored in the night time when load is less. The same energy can be released in day time when load demand is more. This will reduce the capital cost of generating equipment based on load factor. The above system has also less losses compared with other systems.

Operation of superconducting microwave antenna will be studied in details with reference to its directivity, size, energy loss over wide range of frequencies.

The following personnel would be required to man this Centre :—

1. Professor	1	4500-7300
2. Asstt. Professor	1	3700-5700
3. Senior Research Officer	1	3000-5000
4. Research Officer	1	2200-4000
5. Senior Research Fellow	1	3200 (fixed)
6. Junior Research Fellow	3	2400 (fixed)
7. Senior Technical Assistant	1	1640-2900
8. Senior Lab. Technician	1	1400-2300
9. Junior Lab. Technician	1	1100-1500

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10. Lab. Attendant	1	950-1400
11. Steno-typist	1	1200-2040
12. Driver	1	950-1500
13. Peon/Daftary	1	750-940
14. Cleaner	1	750-940

Physical Target

1992-97

1992-93

Creation of all the 16 posts to be completed. Selecting and purchasing of the equipment to be completed. Detailed work plan to be finalized and installing the Centre at the new campus site of the college to be completed.

Financial Outlays

1992-97
(Rs. in lacs)
10.00

1992-93

Nil

Summary of Plan Outlays

- (a) Establishment—The total expenditure under establishment during 1992-97 works out to be Rs. 3.00 lacs.
- (b) Machinery and Equipment—Specialized equipment like Furnaces, Laser gun, Microwave vector network analyser, Precision LCR bridges, Computer aided measurement system, Cryogenic apparatus, Power press, High vacuum thin film units, High power microwave source etc are required for this Centre. A motor vehicle will also be needed for providing necessary mobility of the personnel to visit places of interest like, National Physical Laboratory, Department of Science and Technology etc. A sum of Rs. 6.00 lacs has been provided during 1992-97 for these purposes.
- (c) Others—An expenditure of Rs. 1.00 lac during the period 1992-97 is contemplated for books, journals, contingency, running cost of vehicle etc.
- (h) *Advanced Centre for Entrepreneurship Development—(Rs. 16.00 lacs)*

It is proposed that an advanced centre for Entrepreneurship Development be set up in the College under the Department of Production and Industrial Engineering. The centre will be imparting short term courses pertaining to entrepreneurship to students and others, conduct Entrepreneurship Development Programmes (EDP) for engineering graduates, besides providing consultancy services to entrepreneurs in and around Delhi. The centre will offer an optional course on entrepreneurship in our B. E. programmes.

The total man power required for running this centre is indicated below :—

1. Professor	1	4500-7300
2. Asstt. Professor	1	3700-5700
3. Industrial Liaison Officer	1	2200-4000
4. Technical Officer	1	2000-3500
5. Steno-typist	1	1200-2040
6. U. D. C.	1	1200-2040
7. Daftari	1	775-1025
8. Peon	1	750-940
9. Driver	1	950-1500

Physical Target

1992-97	1992-93
300 persons are expected to be trained in EDP.	To create awareness about the programme, to organise EDP Courses for 30 young Entrepreneurs.

An outlay of Rs. 16 lacs is approved for this sector for the 8th Plan which includes Rs. 5.05 lacs for 1992-93.

Summary of Plan Outlays

- (a) Establishment—The expenditure on account of establishment during 1992-97 works out to be Rs. 8.70 lacs.
- (b) Machinery and Equipment—The total expenditure during 1992-97 would be around Rs. 6.00 lacs for the purchase of projection equipment, reprographic equipment, battery-driven vehicle/van, etc.
- (c) Others—An expenditure of Rs. 1.30 lacs is provided during the period 1992-97 for other charges like the running cost of the vehicle, stationery items, furniture, and other miscellaneous items.

The centres would cater to the various non-degree and continuing education programmes of the College. The centres would also provide the much-needed industrial collaboration in emerging fields of science and technology. The extension services would directly benefit the common man in day-to-day living. The centres, thus, would generate a work environment in the College distinct from the merely stereotyped degree programmes. Several of the students projects, for example, can be taken directly from the field and thus being directly and immediately useful to the industry and the common man. Additionally, one of the centres will provide opportunity to develop attitudes towards self-employment which is a need of the day. It is expected that such a programme will help in employment generation.

6. Book Bank—(Rs. 5 lacs)

The objective of this scheme is to provide text books to students of weaker section of the society on loan for the whole academic session. The text books have to

be updated with the passing of time weeding out the old books which become outdated. In addition, new B.E. courses have been introduced in the College during the last few years, namely, Computer Engineering, Production and Industrial Engineering. Thus, additional funds are required for this scheme during 1992-97 Plan; and a large number of students are benefited by this scheme.

Physical Target

1992-97	1992-93
Rs. 5.00 lacs to be utilized for the purchase of books and racks.	Rs. 1.00 lac to be utilized for the purchase of books and racks.

Financial Outlay

(Rs. in lacs)	
1992-97	1992-93
5.00	1.00

An expenditure of Rs. 5.00 lacs is contemplated during 1992-97 for the purchase of text books (multiple copies) and book racks,

The book bank facility of the College has been utilized by a large number of students in the part, and it is expected that this facility would continue to be utilized by the student body in the years to come. The total outlay under 1992-97 is Rs. 5.00 lacs of which Rs. 1.00 lac is meant for the Annual Plan 1992-93.

7. Part-time Degree Course—(Rs. 100.00 lacs)

Due to persistent demand from in-service diploma holders in engineering for an avenue to upgrade their knowledge and qualification, the Parliament in 1980 decided that part-time degree courses shall start in Delhi College of Engineering. The University of Delhi formulated a 5 year part-time B. E. (Tech.) degree programme for the purpose. Accordingly, the proposal with staff and financial requirements was submitted to the Govt. In 1980, some of the teaching posts were sanctioned and duly created. The first batch of 120 part-time students was admitted in 1982. The batch passed out in 1987 and, as a result, many of them got departmental promotions and some have secured new posts with higher pay scales.

Another batch of 45 students was admitted in 1989 and are currently undergoing the course. In 1990, for the first time the University of Delhi introduced an entrance examination for admission to these courses and the College conducted the test in July-1991. Around 500 candidates sat for the entrance examination for 15 seats each in Civil/Mechanical/Electrical/Electronics & Communication Engineering courses. The admission process is currently in progress and keenness is observed from the candidates employed in approved Engineering Works in and around Delhi to get a seat in this course.

Recently 15 additional teaching positions have been created for these courses for the financial years 1990-91 and 1991-92. The student intake for these courses are being increased in a phased manner and the annual intake at the end of 1992-97 plan is expected to reach a level of 135 as per the details indicated below :

- (i) Civil Engineering—Intake 30 per year. During 1991-92, 15 students are being admitted.

- (ii) Electrical Engineering—Intake 30 per year. During 1991-92, 15 students are being admitted.
- (iii) Electronics & Communication Engineering—Intake 30 per year. During 1991-92, 15 students are being admitted.
- (iv) Mechanical Engineering—Intake 30 per year. During 1991-92, 15 students are being admitted.
- (v) Production & Industrial Engineering—It is proposed to start B. E. Tech. part-time course in Industrial & Production Engineering during the VIII Plan with an annual intake of 15 students. Presently, diploma course in Production & Tool Design are offered by Board of Technical Education and there is persistent demand from such students for improving their qualifications. The detailed courses are being prepared for the approval of the University of Delhi for this course.

The following additional manpower would be required for this programme during 1992-97 :—

1. Professor	4	4500-7300
2. Asstt. Professor	7	3700-5700
3. Lecturer	12	2200-4000

Total : 23 Posts

Physical Target

<u>1992-97</u>	<u>1992-93</u>
Student intake to be increased to 135 per year	Student intake 60

Financial Outlays

<u>1992-97</u>	(Rs. in lacs)	<u>1992-93</u>
100.00		18.00

Summary of Plan Outlays

Establishment—The bulk of the expenditure is due to the salary component of the teaching staff. The total expenditure during 1992-97 under establishment works out to be Rs. 80.00 lacs.

An expenditure of Rs. 20.00 lacs during the period 1992-97 is contemplated for special services, office expenditure, consumable items etc.

Continuing education for the technical personal is extremely important in view of the explosion of knowledge and fast changing technological scenario in the present age. With the new campus of the College coming up at Bawara Road the College looks forward to significantly expand the educational facilities including facilities for

updating knowledge of in-service personnel. In the new campus, the annual intake can easily be increased to 150 students.

8. *Creation of Posts for Computer Centre—(Rs. 30 lacs)*

With the importance of computer application in the various fields of industrial and commercial establishments, training of engineering students in computer software has become absolutely essential. Facilities for computer education and software development is to be provided in all engineering institutions as suggested by the national education policy, Govt. of India. With this objective, computer training has been made compulsory for all the under-graduate and post-graduate students. The College possesses HP-9000, ICIM-6000 computer systems in addition to a host of PC/XTs. and PC/ATs. Facilities of local area networking are existing in the present campus itself besides facilities of colour graphic display, laser printer, X-Y plotter, dot matrix printer, line printer etc. During the last plan period 1985-90, it was proposed to create some posts (full-time), out of which only the post of 'Head of Computer Centre' has been created. It is proposed to run the centre to its optimum capacity, and for that purpose the following full-time posts are required :—

1. Head of Computer Centre	1	4500-7300 (created)
2. System Engineer	1	3700-5700
3. System Programmer	1	3700-5700
4. Programmer	1	2200-4000
5. Computer Operator (Sr.)	1	1600-2900
6. Computer Operator (Jr.)	1	1400-2600
7. Job Receptionist	1	1200-2040
8. Tape/Disc Librarian	1	1200-2040
9. Data Entry Operator	2	1200-2040
10. Supporting Administrative Staff	3	950-1500
11. Trainee Programmer	1	1000(fixed)
12. Trainee Operator	1	800 (fixed)
13. Peon/Daftary	1	775-1025
14. Lab. Attendant	1	950-1400

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A detailed discussion in the Ministry of H.R.D., Govt. of India was held in this connection, as a result of which, the post of Head of Computer Centre was created and recruitment rule has been sent for approval.

Physical Target

1992-97

Creation of the rest 16 posts and shifting to the new Computer Centre in the new campus.

1992-93

Creation of 10 posts.

Financial Outlays

<u>1992-97</u>	(Rs. in lacs)	<u>1992-93</u>
30.00		2.20

Summary of Plan Outlays

- (a) Establishment—The bulk of the expenditure is the salary component and the total expenditure under establishment during 1992-97 works out to be Rs. 20.00 lacs.
- (b) Machinery and Equipment—The expenditure on account of machinery and equipment would be Rs. 8.00 lacs.
- (c) An expenditure of Rs. 2.00 lacs during the period 1992-97 is contemplated for furniture and computer stationery.

A modern Computer Centre having a provision of 24 hour operation is being planned for the College at the new campus site.

9. Renovation of Old College Building at Kashmere Gate—(Rs. 35 lacs)

Most of the buildings of the College at Kashmere Gate are more than 30 years old and they require major repair and renovation to keep them functional. Moreover, the B.E. students intake was increased in 1989 to 320 from the previous intake at 280. Two new under-graduate courses, namely B.E. in Production and Industrial Engineering and B.E. in Computer Engineering have been started with effect from 1987 and 1989, respectively. One new post-graduate course in M.E. in Polymer Technology was started in 1986. Therefore, more class rooms are required to be provided by renovating and altering the existing buildings and workshops. Accommodation is also to be provided for an examination cell in the College. However, in view of the construction of buildings at the new site of the College at Bawana Road, it is proposed to provide a minimal expenditure for the renovation of Old College Building at Kashmere Gate during the VIII Plan. Accordingly, a sum of Rs. 35.00 lacs is proposed for the purpose as detailed below :—

Physical Target

<u>1992-97</u>	<u>1992-93</u>
Rest of repair work for proper teaching facilities.	To provide Micro-Processor & P.G. Lab. in Electrical Engg. Block PCB Lab. in Electronic Deptt. & Computer Lab. in Maths Deptt. Major repair of Admn. Block, Heat Engine Lab. Chemistry Block, Workshops and Hostels.

Financial Outlays

<u>1992-97</u>	(Rs. in lacs)	<u>1992-93</u>
35.00		17.00

Although the new campus of the College is under construction at Bawana Road, the College still has to function at the old campus at Kashmere Gate for the next few years. The main Office Block and the Chemistry Block are particularly very old structures and the entire roof heavily leaks during intense showers and thus posing a threat to the stability of these Blocks. Improvised class rooms, rooms for teachers are also to be provided since a large number of new teaching positions have been created to teach the new courses introduced and also to teach at evening hours to part-time degree students. The examination cell is very urgently required and some manpower has already been created. Space is to be provided for this Cell also. Accordingly, a sum of Rs. 35 lacs has been provided during 1992-97 and the entire amount is Capital expenditure. The expenditure should taper off from year to year and the provision for 1992-93 is Rs. 17 lacs.

10. *Expansion of educational facilities at Delhi College of Engineering—
(Rs. 150 lacs)*

To meet the shortage of technical manpower in the emerging areas of technology, the following courses are proposed to be either spilled over to VIII Five Year Plan from the VII Plan or started afresh during the VIII Plan :—

B.E. Courses (U.G.)

- (i) Computer Engg.—Intake 30 per year and started from 1989-90 and is to be continued during VIII Plan.
- (ii) Production & Ind. Engg.—Intake 30 per year & started from 1987-88, is to be continued during VIII Plan.

The Expert Committee of All India Council for Technical Education recommended the starting of B.E. in Production and Industrial Engineering and B.E. in Computer Engineering and accordingly from the year 1987-88 students have been admitted for B.E. Production and Industrial Engineering Course, although due to shortage of teaching staff the College could admit twenty students as against the approved intake of 30 students per year. Similarly from the year 1989-90 students have been admitted for B.E. Computer Engineering Course, although for the shortage of teachers in the College the admission has been limited to twenty students as against the sanctioned intake of 30 students per year. It is proposed to continue B.E. Production and Industrial Engineering and B.E. Computer Engineering Courses at Delhi College of Engineering, Delhi during the VIII Plan.

- (iii) Environmental Engg.—Intake 30 per year, is in process at the level of University of Delhi and is to be spilled over to VIII Plan.

Earlier, the Ministry of Human Resource Development encouraged the College to start the course of B.E. in Environmental Engineering at Delhi College of Engineering, Delhi. An All India Seminar was also conducted by the Ministry in this regard in which the College was invited to participate. Due to acute shortage of

teachers in the concerned department of the College, the idea of starting B.E. in Environmental Engineering could not be pursued during the VII Plan period. However, the College wishes to start B.E. in Environmental Engineering during the VIII Plan period and the process of finalising the curriculum is in process at the level of University of Delhi. The intake proposed is 33 per year which is similar to the intake of B.E. Production and Industrial Engg. and B.E. Computer Engg. It is proposed to start the admission process during the year 1992-93 and therefore sufficient time is available to get the necessary approval of Govt. of India.

- (iv) Polymer Tech. & Chemical Engg.—Intake 40 per year—The scheme is pending with the University of Delhi and is to be spilled over to VIII Plan.

The B. Ch. Engg. under the University of Delhi was continuing in this College before the establishment of Indian Institute of Technology, Delhi, when the department enblock was shifted to IIT, Delhi. With the rapid development of chemical industries in general and petrochemical industries in particular it is proposed to restart the course with the nomenclature of Polymer Tech. and Chemical Engg. in Delhi College of Engineering under VIII Plan. The scheme of examination and curriculum are pending with the University of Delhi and it is proposed to start this course towards the far end of VIII Plan. There is a proposal of shifting of the College to a much bigger campus for which the working drawings of the various teaching departments are in the process of being finalised. Thus in the new campus, there would be no constraint of space for setting up chemical pilot plants and various processing labs.

- (v) Instrumentation & Control—Intake 30 per year; course approved by the University of Delhi. It is proposed to start at Delhi College of Engg., Delhi under the VIII Plan.

The course already stands approved by the University of Delhi. Since Delhi College of Engineering is already running one M.E. course in Instrumentation and Control for the last several years, it has the necessary lab. facilities to start the B.E. course in Instrumentation and Control without any difficulty. Teachers as per norms of the Government of India would however be required and it is proposed to admit students to this course from the year 1992-93.

P. G. Courses

- (i) M.E. Polymer Tech.—Intake 10 per year—course started from 1986, is continuing and is to be continued during VIII Plan. (Ministry also sanctioned an intake 5 per year for a 5 semester part-time M.E. course in Polymer Technology and the admission are being made currently).

M.E. course in Polymer Technology has already started in Delhi College of Engineering from the year 1986 with an intake of 10 full-time students per year and five part-time students per year. Sanction of Ministry of Human Resources Development for the faculty positions and purchase of equipment already exists. It is proposed to continue this course during the VIII Plan and the course is receiving wide response from the student community on one hand and Polymer Technology Industries including tyre industries in particular on the other.

- (ii) M.E. in Industrial System Engg.—Intake 10 per year—course approved by the University of Delhi and is to be spilled over to VIII Plan.

With the introduction of B.E. course in Production and Industrial Engineering, it would be easier to develop lab. facilities for the M.E. course in Industrial System Engineering. Sanction of Government of India according to the norms is however required. It is proposed to start this course during the year 1992-93 and therefore sufficient time is available to get the necessary sanction of Govt. of India.

- (iii) M. E. in Power Apparatus & System—Intake 10 per year—course is approved by the University of Delhi and is to be spilled over the VIII Plan (Admission to 5 semester part-time M.E. in Power Apparatus & System is continuing for the past several years.)

Delhi College of Engineering is offering one M.E. course in Power Apparatus & Systems to engineers employed in Delhi on a part-time basis for the last several years with an intake of 5 students per year. It is now proposed to offer the same M.E. course to full-time students during the VIII Plan period with an intake of 10 students per year. The course naturally is approved by the University of Delhi. Since no teaching position was sanctioned for teaching the part-time students and the faculty was putting additional efforts with a view to establish liaison with the relevant industries and Govt. departments in and around Delhi, it would now be necessary to have teachers according to the norms of Govt. of India for offering this course to the full-time students. Since all lab. facilities for running this course already exists, it is proposed to start the full-time course of M.E. in Power Apparatus & Systems at Delhi College of Engineering from the year 1992-93.

- (iv) M. Sc. in Applied Physics—Intake 10 per year—course approved by the University of Delhi and is to be spilled over to VIII Plan. (Annual intake of 10 students for 5 semester part-time M. Sc. in Applied Physics is continuing for the last several years.)

Delhi College of Engineering is admitting 10 students every year for employed scientists in and around Delhi on a part-time basis to the course of M. Sc. in Applied Physics. Admission to this course has continued for the last several years and thus the lab. facilities exist and naturally the course is approved by the University of Delhi. Similar to the course of M. E. in Power Apparatus and Systems as at present, there is no sanction of teaching positions for the course of M. Sc. in Applied Physics also. The College proposes to continue this course and extend to full-time students during the VIII Plan period with an intake of 10 students per year. It is proposed to start the full-time course of M. Sc. in Applied Physics from the year 1992-93. Sanction of Govt. of India as per norms would be required.

- (v) M.E. in Computer Applications—Intake 10 per year—course approved by the University of Delhi. It is proposed to start this course during VIII Plan.

The University of Delhi has approved the course of M.E. in Computer Application and Delhi College of Engineering has already set up a good computer centre with Hewlett Packard 9000/560 series computer with various ancilliary facilities

like graphic printer, magnetic tape drive, laser jet printer, plotter etc. In addition H.P. System, a large number of IBM compatible PC/XTs besides independent computing units can be used for terminal emulation for the main HP system. Further the centre has been provided with local area net working facilities. The Department of Electronics, Govt. of India was consulted by the College in the matter of establishing the primary facilities of this computer centre. There is huge demand all over the country for similar courses on Computer Applications since this technology is bound to play a big role in many areas of human activity during the fore-seeable future. The College purposes to start a full-time course of M.E. in Computer Applications with an intake of 10 students per year at the earliest. However, sanction of teaching position by the Govt. of India as per norms is required. Delhi College of Engineering is eager to start the course of M.E. in Computer Applications from the year 1992-93 at the latest.

- (vi) M.E. Geotech. Engg.—Intake 10 per year—course approved by the University of Delhi. It is proposed to start this course during VIII Plan.

The University of Delhi has approved M.E. course in Geotechnical Engineering a subject which is in great demand since large scale irrigation projects all over the country are being thought of during VIII and subsequent plan and many such projects including micro-hydel projects in the foot hills of Himalayas require specialised training in Geotech. Engg. In addition, developments in the field of Geo-synthetics in India and abroad has thrown new opportunities to improve bearing capacities of relatively weak soil masses. The College proposes to start one M.E. course in Geotechnical Engineering during the plan period with an intake of 10 full-time students per year. Basic lab. facilities to start the course exist in the college. Sanction of Govt. of India according to the norms is however required. It is proposed to start this course during the year 1993-94 and therefore sufficient time is available to get the necessary sanction from Govt. of India.

- (vii) M.E. Oil Hydraulics & Pneumatics—Intake 10 per year—course approved by the University of Delhi. It is proposed to start this course during VIII Plan.
- (viii) M.E. Industrial Equipment Design—Intake 10 per year—course approved by the University of Delhi. It is proposed to start this course during VIII Plan.

The University of Delhi has approved both the M.E. courses in Oil Hydraulics & Pneumatics and Industrial Equipment Design. During the VIII Plan it is proposed to start both the courses. Both the courses have good deal of demand in the industry. Many of the basic lab. facilities for both the courses exist in the college. Sanction of Govt. of India according to the norms is, however, required. The teaching of both the courses is proposed to start from the year 1993-94 and, therefore, sufficient time is available to get the necessary sanction from Govt. of India.

Ph. D Programmes

During the last decade, the teachers of the College have guided about 100 Ph. D theses mostly under the Faculty of Technology of the University of Delhi. Ph. D students mostly were teachers serving in the College and conducted the Ph. D work on a part-time basis. From time to time requests are being received

idents for admission to Ph. D Programme on a full-time basis. Several such proposals have been discussed in the board of Research Studies under the Faculty of Technology of the University of Delhi, and it has been observed there that such Ph. D scholars must receive scholarships and then only they can be treated as Ph. D scholars of the University of Delhi. This College has suitable expertise in several areas of science and technology to guide doctoral level research. Thus it is proposed to admit Ph. D scholars in the College in the various disciplines in emerging areas of technology & science. Provision for Ph. D registration exists at the University of Delhi through Board of Research Studies. Each scholar will be admitted for a full-time three-year programme. However, the total number of Ph. D scholars in the College at any point of time would be limited to 25 during the VIII Five Year Plan.

The following teaching posts are proposed to be created during the VIII Plan for the above-said purpose :

For Under-graduate Course

1. Professor	6	4500-7300
2. Asstt. Professor	9	3700-5700
3. Lecturer	17	2200-4000
4. Tech. supporting staff as per norms (about 50% of above in terms of expenditure)		

For Post-graduate Course :

1. Professor	7	4500-7300
2. Asstt. Professor	7	3700-5700
3. S.S.A.	8	1640-2900
Total posts	<u>22</u>	

Ph. D Programmes

1. Ph. D Scholars	25 (scholarship)
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Physical Target

	<u>1992-97</u>	<u>1992-93</u>
At the end of the period annual intake at B.E. level would reach 425, at full-time M.E. level would reach 120 & at Ph. D level would reach 25.		B.E. : 320 M.E. : 90 Ph. D : 25

Financial Outlays

	(Rs. in lacs)	
	<u>1992-97</u>	<u>1992-93</u>
	150.00	16.00

Summary of Plan Outlays

- (a) *Establishment*—The bulk of the expenditure is due to the salary component of teachers, technical supporting staff and the scholarship component of M.E. and Ph. D students. The total expenditure during 1992-97 works out to be Rs. 95.00 lacs.
- (b) *Machinery and Equipment* —The expenditure on account of machinery and equipment during 1992-97 would be about Rs. 50.00 lacs.
- (c) *Others*—An expenditure of Rs. 5.00 lacs during the period 1992-97 is contemplated for furniture, special services etc.

With the new campus of the College coming up at Bawana Road (near Badli Railway Station), the College looks forward to significantly expand the educational facilities leading to annual intake of 425 at B.E. level, 120 at full-time M.E. level and 25 at full-time Ph. D level. There would be enough space in the new campus to expand laboratory, library and computer centre facilities. Thus, expansion of educational facilities is one of the main thrusts of the College in the VIII Plan, next only to the construction of the new campus.

11. (Coaching classes for SC/ST/weak students)—(Rs. 3.00 lacs)

There is need for separate intensive coaching for students belonging to SC/ST and other weaker sections of the society. Such classes are quite regularly arranged in the College, normally between 3.30 p.m. and 5.30 p.m. on working days. It is proposed to continue the scheme during the 1992-97 Plan period. The details of expenditure for this scheme are indicated below :—

Physical Target

1992-97	1992-93
About 500 students are expected to be benefitted.	About 100 students are expected to be benefitted.

Financial Outlays

1992-97	(Rs. in lacs)	1992-93
3.00		0.60

12. Strengthening of General and Hostel Administration—(Rs. 14.00 lacs)

Having started as a technical school in 1940/1941, the College has gradually acquired the status of one of the leading engineering institutions in Northern India. It now not only caters to the teaching and training of under-graduate courses but also imparts instructions at postgraduate level in several specializations. Besides, full-time

research leading to Ph.D is also under active considerations in various areas of engineering and applied sciences. The college undertakes the responsibility of continuing education; and B.E. (Tech.) part-time courses at undergraduate level and part-time post-graduate courses are offered to serving engineers for the said purpose. At the end of the VIII Plan, the annual intake for the various courses would be as follows :—

B.E. (Four-year course)	425
M.E. (1-year course)	120
M.E. (Full-time sponsored)	25
Ph. D (Full-time with scholarship)	25
B.E. (Tech.) (5-year part-time course)	150
M.E. (2-year part-time course)	55
Ph. D (Part-time)	6

The total full-time student population in the college would then be 2,015 and the same excludes the students from friendly and developing countries that the admitted in B.E. and M.E. programmes with the approval of the Govt. of India.

Since the present state of General Administrative set-up in the College is not at all conducive for further growth and development of technical education as envisaged under the New Education Policy, it is proposed to strengthen the same under the VIII Five Year Plan in the following manner.

It is proposed to upgrade the post of the Principal to the level of Director with pay scale of 7300-7600. He/she will be the Head of the Institution and would be responsible for all the activities of the College.

The following new posts are also proposed to be created during the VIII plan :

S. No	Name of the post	No. of the posts	Scale of pay
1.	Registrar	1	3700-5700
2.	Financial Adviser	1	3700-5700
3.	Dy. Registrar	1	3000-5000
4.	Asstt. Registrar	5	2200-4000
5.	Security Officer	1	2200-4000
	Total	9	

Physical Target

1992-97

Creation of all the 8 posts to be completed.

1992-93

Dy. Registrar : 1
Asstt. Registrar : 3
Proposed to be created.

Financial Outlays

(Rs. in lacs)	
1992-97	1992-93
14.00	2.00

Summary of Plan Outlays

- (a) Establishment—The bulk of the expenditure indicated above refers to establishment only. Thus the expenditure under establishment during 1992-97 works out to be Rs. 13.00 lacs.
- (b) Others—An expenditure of Rs. 1.00 lac during the period 1992-97 is contemplated for office furnishing and Miscellaneous items.

13. Examination Cell—(Rs. 27.00 lacs)

Being convinced regarding the dire need of an Examination Cell in the College, Delhi Administration created five posts for this purpose on 12-7-1990. In the mean time, the University of Delhi decided to introduce the mode of Combined Entrance Examination (CEE) for admission to B.E. courses for the candidates passing Board examination from schools located in Delhi. The CEE was conducted on 2-6-1990 and the College had to provide massive support in organising this big task. Again, the University of Delhi introduced Entrance Examination for admission to B.E. (Tech.) part-time degree course, and the College was asked to conduct this Entrance Examination taking the complete responsibility. This Entrance Examination was conducted on 15-7-1990. The number of CEE bulletins sold was around 9,000 and the same for B.E. (Tech.) part-time Entrance Examination was about 1,100. Both these Entrance Examinations were conducted successfully and it is expected that these modes of entrance to B.E. and B.E. (Tech.) part-time courses would become the norm in future years. In addition, the University of Delhi has decided to handover the semester examination work to the College in a big way and the College is executing this work for the last several semester examinations. Lastly, the Faculty of Technology, University of Delhi, has passed a flexible type of examination reform for the B.E. courses which takes into its stride continual evaluation of a student throughout the semester in accordance with the guidelines of the National Educational Policy of the Govt. A space for Examination Cell to function is being carved out from the available space in the old campus of the College. Quite elaborate space for these activities has been planned in the new campus of the College currently under construction at Bawana Road (near Badli Railway Station). Considering all these points, the following manpower is proposed for the Cell during 1992-97 Plan : —

1. Officer-in-charge (Exam.)/ Deputy Registrar (Exam.)	1	3000-5000
2. Dy. Admn. Officer (Exam.)/ Asstt. Registrar (Exam.)	2	2200-4000 : 1 post created
3. Data Entry Operator	2	1200-2040 : 1 post created
4. Superintendent	1	1640-2900
5. Console Operator	2	1640-2900 : 1 post created
6. Typist (English)	1	950-1500

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7. Daftri	2	775-1025 : 1 post created
8. Peon	4	750-940 : 1 post created
9. Unskilled Labour	2	750-940
10. Driver	1	950-1500
Total :	<u>18 posts</u>	<u>: 5 created</u>

Physical Target

<u>1992-97</u>	<u>1992-93</u>
Creation of all the 18 posts to be completed.	Creation and filling up of 4 additional posts.

Financial Outlays

(Rs. in lacs)	
<u>1992-97</u>	<u>1992-93</u>
27.00	3.65

Summary of Plan Outlays

- (a) Establishment—The total expenditure under establishment during 1992-97 works out to be Rs. 16.00 lacs.
- (b) Machinery and Equipment—The expenditure on account of Machinery and Equipment like Computer Systems, Printers, Plain Paper Copiers, Cyclostyling Machines, Motor Vehicle etc. during 1992-97 is estimated to be Rs. 7.00 lacs.
- (c) Others—An expenditure of Rs. 4.00 lacs during the period 1992-97 is contemplated for computer and other stationery, furniture, travel and other miscellaneous items.

14. Revision of Staff Structure—(Rs. 10.00 lacs)

In conjunction with the item 12 above (Strengthening of General and Hostel Administration), the following proposal is being submitted for the purpose of further streamlining the day-to-day functioning of the College.

The H.O.D. presently have to spend lot of time in going through the routine matters involving individual students of the concerned Department, much of which require centralised decisions. Thus, a large number of teachers to-day are performing similar kind of activity and the time thus spent could be better utilized for Lab. development, upgradation of course content, preparation of teaching modules utilizing various educational technology techniques, arranging extension lectures etc. Additionally, the Faculty of Technology of the University of Delhi, has recently approved of a flexible kind of examination reform which calls for a greater monitoring of individual students academic performance, which will all the more increase the work load of H.O.D. To overcome this, it is proposed that four of the existing Professors

be named as Deans, say for a term of three years, who would be fully concentrating on the type of activities mentioned above, and, consequently, relieving the H.O.Ds substantially from such activities. After all, the norm for teaching for H.O.Ds is 10 hours per week, as against 12 hours per week for the rest of the Professors. The following further details are put forward towards this end :—

(i) *Dean (Undergraduate Studies)*

He/she will be responsible for co ordination of all academic administration in regard to all B.E. (four year course) programmes and monitoring individual student's academic performance together with counselling.

(ii) *Dean (Postgraduate Studies and Research)-cum-Bursar*

He/she will be responsible for co-ordination of all academic administration in regard to all M.E., M. Sc. (Applied Sciences) and Ph. D. programmes, and monitoring individual student's academic programmes and release of scholarships. He/she would also be responsible for bringing out annual report of the College.

(iii) *Dean (Students' Welfare)*

He/she will be responsible for co-ordinating activities related to students' welfare programmes, such as Games and Sports, NSS/NCC programmes, Cultural festivals, Film shows, U-special bus service, Annual exhibition, Degree distribution, issues related to students' discipline etc.

(iv) *Dean (Continuing Education and Council)*

He/she will be responsible for all part-time evening programmes, refresher-type short term courses, seminars and conferences in addition to preparation of agenda and keeping records of decisions taken in the Council meetings. It may be stated here that for the last one year or more, the College has successfully experimented on a Council mode of decision-making. This is also in accordance with the guidelines recently circulated by the University Grants Commission.

It is proposed that the Deans be offered a special pay of Rs. 500/- per month. The only additional man power required would be one steno-typist, one UDC and one peon attached with the office of each of the four Deans. Thus, the following plan posts are proposed to be created during the 8th Plan :—

1. Steno-typist	3	1200-2040
2. U.D.C.	3	1200-2040
3. Peon	3	750-940
Total :	<u>9</u>	<u>posts</u>

Physical Target

<u>1992-97</u>	<u>1992-93</u>
Creation of all the 12 posts to be completed.	Steno-typist 2 UDC 2 Peon 2 Proposed to be created.

Financial Outlay

<u>1992-97</u>	(Rs. in lacs)	<u>1992-93</u>
10.00		1.00

Summary of Plan Outlays

- (a) *Establishment*—The total expenditure under establishment during 1992-97 works out to be Rs. 9.00 lacs.
- (b) *Others*—An expenditure of Rs. 1.00 lac during the period 1992-97 is contemplated for office furnishing and miscellaneous items.

15. Installation of Electronic Switching System—(Rs. 10.00 lacs)

The College is at present having 15 external telephones, which cannot cope with the demand of the College. The College is having 41 Professors in the pay scale of 500-7300, 60 Asstt. Professors in the pay scale of 3700-5700 and 70 Lecturers in the pay scale of 2200-4000 besides Administrative Officer, Deputy Administrative Officer, Stores Officer plus newly created posts of Accounts Officers, D.A.O. (Examination), Hostel Superintendent. In order to have efficient communication system in present campus, it is necessary to have small EPABX/EPAX systems in each teaching Department so that maximum number of teachers/officers can have effective communication amongst themselves and also with the outside agencies. Further, in the new campus of the college, an EPABX system of about 200 lines and an EPAX system of about 400 lines would be required. For their regular maintenance and repairing, man power is required as indicated below :—

1. Operator	2	1400-2600
2. Foreman	1	1640-2900
3. Senior Technician	2	1400-2600

Total : 5 posts

Physical Target

<u>1992-97</u>	<u>1992-93</u>
EPABX/EPAX systems would be installed in 6 Blocks. Creation of all the 5 posts to be completed.	One EPABX & one EPAX are to be installed.

Financial Outlays

<u>1992-97</u>	(Rs. in lacs)	<u>1992-93</u>
10.00		2.00

Summary of Plan Outlays

- (a) *Establishment*—The total expenditure under establishment during 1992-97 works out to be Rs. 2.00 lacs.
- (b) *Machinery and Equipment*—The expenditure on account of machinery and equipment during 1992-97 would be Rs. 8.00 lacs.

As mentioned earlier, a much bigger EPABX/EPAX system would be required in the new campus of the College under construction at Bawana Road. It is proposed to gain experience of installing, operating and maintaining smaller units of similar systems in the old campus.

(III) Delhi Institute of Technology

Delhi Institute of Technology was started in 1983 for education and research in the generic areas of emerging technology. A decision has been taken by the Board of Governors to prepare a sharply defined profile of growth of the Institute keeping in view the thrust in the areas of Electronics, Communication, Computer and Instrumentation Engineering which is being felt all over the world. A committee consisting of eminent persons in the country has held prolonged deliberations to evolve a suitable Profile of the Institute in order that the Institute becomes an excellent centre in the areas of Emerging Technology. The profile of growth of the Institute matches the present and future requirements. It also conforms to the character of the City of Delhi. The 8th Plan proposal is in line with this Profile. Some of the objectives of the Institute are as given below which focus the special features of the Institute.

- (a) to provide for excellence in instruction at the Under-Graduate and Post-Graduate levels, undertake and sponsor research in such branches of engineering and technology, applied sciences and management sciences and for the advancement of learning and dissemination of knowledge in such branches according to the provision thereof in the rules and regulations of the Society with primary emphasis on emerging Technology ;
- (b) to set up a science and technology park ;
- (c) to organise and undertake extra-mural teaching and extension services ;

- (d) to undertake industrial R & D and consultancies ;
- (e) to lend support in identifying and starting small scale industries around the Institute through Entrepreneurship programmes ;
- (f) to undertake technology transfer programmes ;
- (g) to develop suitable programmes for effectively utilizing the built-in infra-structural facilities in the Institute ;
- (h) to establish linkages between the Institute, Industries, R & D Organisations and other Universities/Institutes of higher Technical education for teaching and research programmes in India/abroad.

Instruction programmes have been divided into undergraduate, post-graduate and doctoral programmes with a provision of cross migration from different disciplines. Post-graduate Programmes would be tailored and run in co-operation with Industries and R & D organisations as far as possible. Special courses of variable duration and modular nature would be developed. Research and development centres have been conceived to build special thrust and to undertake execution of certain Missions in chosen areas. B.E. Programmes of 4 year duration in each department would admit 100 students in phases and provide specialization in various related streams by means of optional courses in the III and IV years of the programmes. Likewise M.E. Programmes with an intake of 50 students in phases would be organised in specialized topics in each department. The regular programmes will cater to full time students whereas P.G. Diploma Programmes will cater to the sponsored candidates from industries who have adequate experience in the practical aspects of the subject and therefore, the thesis/project requirement may not be essential for such students. The P.G. certificate programmes would be designed for those sponsored candidates from the Industries who need only an exposure to selected specialized set of courses.

Integrated M. Tech. Programmes will be a combination of B.E. and regular M.E. programmes so that the entire material may be completed in 5 years, by motivated students, instead of 5-1/2 years.

The Institute has been conceived to develop as under :—

- (i) as an Institute for the promotion of Under-graduate and Post-graduate Education, Continuing Education, Training and Research in Engg., Applied Sciences, Management Science, Humanities and Social Sciences with multi-level entry vertically and a system of flexible migration in the various disciplines horizontally.
- (ii) as an Institute for the promotion of a Co-operative Programme of Education with Industries and R&D Organisations for offering tailor-made Courses keeping in view Societal needs.
- (iii) as an Institute for an integrated Under-graduate and Post-graduate programme in Engineering with Management, Design Engineering and Research methodology supported by a System of Counselling and Guidance.
- (iv) as a Research Institute encompassing a Chain of Advanced Laboratories/Centres with a focus on "Technology Transfer", Research Methodology, Design Engineering, Ergonomics and Technology Forecasting.

- (v) as a Supporting Agency for the Science and Technology Entrepreneurship Park that would help to nucleate the "Technology Transfer" programme.

2. The academic programmes are divided into two categories Under Graduate Programmes and Post Graduate Programmes in the following manner.

Under Graduate B.E. Programmes (Continuing Education)

- (a) Division of Electronics & Communication Engineering with specialization in Communication System, Telematics, Microwave and Radar Satellite Communication, Optical Communication, Signal Processing, Microprocessor, VLSI—intake of students 60.
- (b) Division of Computer Engineering with specialization in Microprocessor Application, A.I. & Robotics, System and Application Software, Advanced Computer Architecture, CAD, Computer Commn., ISDN and Expert Systems—intake of Students 60.
- (c) Division of Instrumentation and Control Engineering with Specialization in Aerospace and Elect. System, Remote Sensing, Consumer Elect., Power Electronics—intake of students 60.
- (d) Division of Manufacturing Process and Automation with Specialization in Manufacturing Process CAD/CAM, Process Automation, Work and Motion Studies, Expert System for Industrial Application—intake of students 45.
- (e) Schools of Humanities and Social Science, Management and Entrepreneurship as well as of Applied Sciences will support courses required in various B.E. Programmes, Entrepreneurship, Co-operative programmes in Tech., forecasting, and Masters Programmes in Applied Science, Mathematics, Management and Entrepreneurship.

Post Graduate M.E. Programmes

- (a) School of Applied Science with speicalization in Opto Electronics, Computational Science—intake of students 10+10.
- (b) Division of Electronics & Communication Engineering with specialization in Communication System, Telematics, Microwave and Radar, Signal Processing, Microprocessor, VLSI—intake 15 studerts.
- (c) Division of Computer Engineering with specializatiøn in Microprocessor application, A.I., Robotics, System and Applicatiøn Software, Advanced Computer Arch, CAD, Computer Communication, ISDN and Expert Systems—intake 15 students.
- (d) Division of Instrumentation and Control Engineerng with specialization in Aerospace and Elect. System, Remote Sensing, Consumer Electronics and Power Electronics—intake 15 students.
- (e) Division of Manufacturing Process and Automation with specialization in CAD/CAM, Process Automation. Work and Mction Studies, Expert systems for Industrial Appl —intake 15 students.

Besides the above academic programmes, it includes establishment of the following facilities :—

- (a) Centre for Electronics Design and Technology (CEDT).
- (b) Science and Technology Entrepreneurship Park (STEP).
- (c) Continuing Education Programme (CEP).
- (d) Computer Education Network and Project Cell (CEN).

Scheme-wise write-up is given below :—

(1) *Construction of new building for DIT at Papan Kalan (Dwarka) (Rs. 2800.00 lacs)*
Land :—145 acres of land has been allotted by DDA to DIT at Dwarka (Papankala) at a cost of Rs. 1380.00 lacs. The payment towards land cost has been fully made during the 7th Plan.

Land Development :—It is proposed to develop the land with necessary infrastructure such as boundary wall, development of site, drainage, sewerage, roads, water supply, street lighting, environmental development besides shifting of overhead HT transmission lines passing through this area. Earlier a sum of Rs. 606.00 lacs was provided, which was based on C.P.W.D. norms corresponding to the cost Index for Delhi 494 as approved by Director General of Works C.P.W.D. New Delhi vide his office Memo No. CDO/S&S/CI/II/104/231 dated 31-10-89. However, there has been escalation in prices which has been provided for by increasing the estimated cost by 25%. Consequently a provision of Rs. 757.50 lacs has been made during the current Five Year Plan.

Building :—It was proposed to take possession of the land at Palam and to complete the I Phase of the Institute Building at a cost of Rs. 1364.00 lacs during the 7th Plan. Due to late allotment of land, the construction of building could not be taken up in Phase I. Therefore, it had to be carried over to 8th Plan and clubbed together with Phase II in order to make up for the delay in starting construction of the project. A sum of Rs. 3594.00 lacs was earmarked according to the approved CPWD plinth area rates of 1-10-76 applying the cost Index for Delhi 494 as approved by Director General of Works CPWD New Delhi vide his Office Memo No. CDO/S&S/CI/II/104/231 dated 31-10-89. However, due to the recent escalation in prices the above amount has been increased by 25%. As such a provision of Rs. 4492.50 lacs was earmarked as detailed below :—

<i>Phase</i>	<i>Amount</i>
I Development of Land & Construction of Area 61647 Sqm.	Rs. 5200.00 lacs
II Construction of Area 50906 Sqm.	

However now the provision is being made for Rs. 2800.00 during 8th Plan. It may also be mentioned that construction of building will still spill over to 9th Plan also under Phase III.

A piece of land was taken over from D.D.A. near Palam Village for DIT. Architectural competition was floated for the construction of the buildings but in the meantime, land use was changed by DDA and alternative 145 acres were allotted in Papankala (Dwarka) in June, 1989. The architect was identified through the competi-

tion. The finalization of the agreement with the architect took sufficient time. The construction of boundary wall, site office and stores has been taken up. The same are likely to be completed shortly. Some advance has been deposited with Steel Authority of India to effect timely procurement of steel. The master plan of the campus is being prepared by the architect. It is expected to be cleared by DUAC in the last quarter of the current financial year. The development work will soon be taken up. The construction work will be taken up in the first quarter of the financial year 1992-93.

The year-wise break up of total requirement is given below :—

1992-93	1993-94	1994-95	1995-96	1996-97	(Rs. in lacs) Total
255.00	500.00	700.00	800.00	545.00	2800.00

2. Renovation of Old Buildings and Airconditioning at Kashmere Gate

—(Rs. 23.00 lacs)

Both the academic and administrative blocks including Hostels of the Institute are now located in the Old I.G. Block at Kashmere Gate. Till the buildings under Phase I and II are completed at the new site, renovation works is required to be carried out in the existing buildings. Airconditioning is also required in certain laboratories. A sum of Rs. 23 00 lacs has been provided in the 8th Plan which is approved.

The year-wise break-up is given below :—

1992-93	1993-94	1994-95	1995-96	1996-97	(Rs. in lacs) Total
10.00	7.00	2.00	2.00	2.00	23.00

3. Consolidation of DIT—(Rs. 400.00 lacs)

During the first and second year of the 8th Plan period viz. 1992-93 and 1993-94, the level of projection of pay and allowances is estimated on the basis of the posts provided for during the current financial year 1991-92. The provision for 1992-93 and 1993-94 has, therefore, been proposed in the plan in respect of the following posts for the existing programmes because these posts could not be created earlier. The number of posts has been noted down at the present level of admission for the three courses with annual intake of 135 students.

In addition to expansion in the existing courses, the Institute proposes to take up Post Graduate Programmes also during the VIII Plan. The strength of the students will be 900 Under Graduates and 160 Post Graduates. Proportionate to this, strength of staff will increase during the 8th Plan Period. Keeping this in view Rs. 400.00 lacs has been provided under salaries, allowances, office expenses, other charges, advances

etc. under the single head "Consolidation". Details of the man power requirement are described hereunder :—

The provision for 1992-93 and 1993-94 has therefore been proposed in the plan in respect of the following posts for the existing programmes because these posts could not be created earlier :—

Sl. No.	Name of post	Pay Scale	No. of posts
I. Officers			
<i>(a) Teaching</i>			
1.	Professor (including Professor of Training & Placement)	4500-7300	6
2.	Asstt. Professor	3700-5700	9
3.	Sr. System Analyst	3000-4500/ 3700-5700	1
4.	Forman Instructor	2200-4000	1
<i>(b) Administration & Engg.</i>			
1.	Asstt. Registrar	2200-4000	1
2.	Estate Security Officer	2000-3500	1
3.	Suptd. Engineer	3700-5000/ 4500-5700	1
4.	Asstt. Engineer	2200-4000	2
Total :			22
II. Establishment (Supporting staff, Ministerial Staff & Engineering Unit)			
<i>(a) Technical Supporting Staff</i>			
1.	Mech. Gr. 'A'	1400-2300	3
2.	Mech. Gr. 'B'	1400-2300	4
3.	Mech. Gr. 'C'	1150-1500	5
4.	Cleaner (H. Gr.)	800-1150	1
5.	Cleaner (L. Gr.)	775-1025	4
6.	Demonstrator	1640-2900	2
7.	Tech. Asstt.	1400-2600	3
8.	Sr. Scientific Assistants	1640-2900	4
9.	Console Operator	1640-2900	5
Total :			31

(b) Ministerial :

1. Jr. Accounts Officer	1640-2990	1
2. PA to Dir./H. Clerk	1400-2300	3
3. Jr. Stenographer	1200-2040	1
4. U.D.C.	1200-2040	5
5. L.D.C.	950-1500	6
6. Driver	950-1500	1
7. Chowkidar	750-940	5
8. Sweeper	750-940	4
9. Peon	750-940	4
10. Gestetner Operator	775-1045	1
11. Farash	750-940	2
12. Class IV	750-940	5
	Total :	<u>38</u>

(c) Establishment (Engineering Unit)

1. Jr. Engineer	1400-2300	3
2. Draftsman Gr.-I	1600-2660	1
3. Mason	950-1500	2
4. Fitter	950-1500	1
5. Sewerman	775-1025	1
6. Electrician	1200-1800	1
7. Asstt. Wireman	800-1150	1
8. Khallasi	750-940	2
9. Mali	750-940	2
10. Helper (Beldar)	750-940	5
	Total :	<u>19</u>

During the last 3 years viz. 1994-95, 1995-96 & 1996-97 of 8th Plan period, the requirements provisions have been made for Pay and Allowances etc. corresponding to the expansion of various activities in the institute necessitating creation of additional posts.

The details of provisions for Salaries and Maintenance from 1994-95 to 1996-97 have been worked out hereunder :—

(A) Under-graduate Programmes

The present intake of students for all three disciplines (Electronics & Communication Engg., Computer Engg., Instrumentation & Control Engg.) is only 45 each.

Considering the national plans and priorities and the envisaged pattern of growth, additional seats are required for engineering students. To meet this requirement it is proposed to increase the intake as follows :—

	Present seats	To be increased to
(a) Electronics & Comm. Engg.	45	60
(b) Computer Engineering	45	60
(c) Instrumentation & Control Engg.	45	60
(d) Manufacturing Process & Automation	—	45
Total :	135	225

This would require augmentation of the existing lab. facilities besides additional staff. Financial implications for this are given below :—

No. of additional students/per year	$3 \times 15 + 45 = 90$
Total No. of additional students (For 4 years course)	$90 \times 4 = 360$
Additional faculty requirement	$= 36$

6 Professors + 10 Asstt. Professors + 20 Lecturers

(Some of the posts already approved to be created for an intake of 135 students are in the process of creation)

The posts of one Registrar and one Librarian are also required to be created.

Sl. No.	Name of Post	No. of Post	Scale
1	2	3	4
<i>(a) Salaries (Teaching)</i>			
1.	Professors	6	4500-7300
2.	Asstt. Professors	10	3700-5700
3.	Lecturers	20	2200-4000
4.	Librarian	1	3700-5700
5.	Registrar	1	4500-7300
	Salaries (Faculty)		Rs. 17.50 lacs
(b)	50% of Teaching Component (Salary of Non-teaching staff)		Rs. 8.75 lacs
	Annual Salary		Rs. 26.25 lacs
(c)	Maintenance expenditure @Rs. 1250/- per student (225x1250)		Rs. 2.82 lacs
	Total Annual expenditure		Rs. 29.07 lacs
	Total for last three years of 8th Plan 29.07x3		Rs. 87.21 lacs (A)

(B) Post Graduate, ME Programmes

The intake of students for various post-graduate ME programmes is proposed as follows (each programme having a number of specializations).

(i) School of Applied Science		20
(ii) Division of Electronics & Comm. Engg.		15
(iii) Division of Computer Engineering		15
(iv) Division of Instrumentation & Control Engg.		15
(v) Division of Manufacturing Process and Automation		15
Total ME students intake	=	80
Total ME students for 2 years	= 2X80	160

No. of additional faculty required for each of the above divisions/schools keeping in view the various specializations as mentioned in 2.2.

(2 Professors+4 Asstt. Professors)	
Total additional faculty required	30
(10 Professors+20 Asstt. Professors)	

Sl. No.	Name of post	No. of posts	Scale
1	2	3	4
	<i>(a) Salary of teaching staff</i>		
			Rs.
1.	Professors	10	4500-7300
2.	Asstt. Professors	20	3700-5700
	Salary (Faculty)		17.50 lacs
	<i>(b) Salary of non-teaching staff</i>		
	50% of Teaching Component		8.75 lacs
	<i>(c) Maintenance expenditure</i>		
	(@Rs. 1250/- per student : 160x1250)		2.00 lacs
	Annual Expenses		28.25 lacs
	Total for last three years of 8th Plan		84.75 lacs
	Total :		84.75 lacs (

(C) Workshop & Labs.

Sl. No.	Name of Post	No. of posts	Scale
1	2	3	4
1.	Professors	5	4500-7300
2.	Asstt. Professors	9	3700-5700
3.	Foreman Instructors	1	2200-4000
4.	Asstt. Registrar	1	2200-4000
5.	Estate Security Officer	1	2000-3500
6.	Sr. Scientific Asstts.	4	1640-2900
7.	Console Operator	1	1640-2900
8.	Mechanic 'A'	3	1400-2300
9.	Mechanic 'B'	4	1400-2300
10.	Mechanic 'C'	5	1150-1500
11.	Cleaner (H. Gr.)	1	800-1150
12.	Cleaner (L. Gr.)	4	775-1025
13.	Demonstrator	2	1640-2900
14.	Tech. Asstt.	3	1400-2600
15.	PA to Dir./H. Clerk	3	1400-2300
16.	UDC	4	1200-2040
17.	LDC	5	950-1500
18.	Chowkidar	4	750-940
19.	Sweeper	4	750-940
20.	Peon	4	750-940
21.	Gestetner Operator	1	775-1025
22.	Farash	2	750-940
23.	Class IV	3	750-940
	Total Annual Salaries		Rs. 20.00 lacs
	Total for last three years of 8th Plan		Rs. 60.00 lacs
	Total		Rs. 60.00 lacs (C)

(D) Workshop & Labs.

S. No.	Name of Post	No. of Posts	Scale
1	2	3	4
1.	Supdt. Manufacturing Process	1	3700-5700
2.	Foreman Instructors	2	2200-4000
3.	Scientific Officers (with flexible complimentation)	5	2200-4000

4. Sr. Scientific Asstts.	6	1640-2900
5. Asstt. Professor Training & Placement	1	3700-5700
6. Jr. Software Engineer	2	2000-3500
7. Console Operators	2	1640-2900
Total Annual Salaries		Rs. 6.25 lacs
Total for last three years of 8th Plan		Rs. 18.75 lacs
Total		Rs. 18.75 lacs (D)

(E) Financial Implications of Engineering Staff

S. No.	Name of Post	No. of Posts	Scale
1	2	3	4
1.	Asstt. Engineer (Civil/Elect.)	2	2200-4000
2.	Jr. Engineer (Civil/Elect./Horticulture)	3	1400-2300
3.	Jr. Accounts Officer	1	1640-2900
4.	Jr. Stenographer	1	1200-2040
5.	U.D.C.	1	1200-2040
6.	L.D.C.	1	950-1500
7.	Draftsman Gr. I	1	1600-2660
8.	Class IV	2	750-940
9.	Mason	2	950-1500
10.	Fitter	1	950-1500
11.	Sewerman	1	775-1025
12.	Helper (Beldar)	5	750-940
13.	Electrician	1	1200-1800
14.	Asstt. Wireman	1	800-1150
15.	Khallas	2	750-840
16.	Mali	2	750-940
	Total Annual Salaries		Rs. in lacs 5.00
	Add 20% contingencies		1.00 (Say)
	Maintenance Materials		12.75 „
	Total		18.75
	Total for last three years of 8th Plan		56.25 lacs (E)

Financial Implications of Engineering Staff

S. No.	Name of Post	No. of Posts	Scale
1	2	3	4
1.	Executive Engineer (Civil/Elect.)	1	3000-4500
2.	Asstt. Engineer (Civil/Elect.)	2	2200-4000
3.	Jr. Engineers (Civil/Elect./Horticulture)	6	1400-2300
4.	Jr. Stenographer	1	1200-2040
5.	U.D.C.	2	1200-2040
6.	L.D.C.	3	950-1500
7.	Draftsman Gr. I	1	1600-2660
8.	Class IV	3	750-940
9.	Carpenter	2	950-1500
10.	Fitter	1	950-1500
11.	Sewerman	1	775-1025
12.	Helper (Beldar)	4	750-940
13.	Electrician	1	1200-1800
14.	Wireman	2	950-1400
15.	Asstt. Wireman	1	800-1150
16.	Khallasi	2	750-840
17.	Mali	4	750-940

Rs. in lacs

Annual Salaries	6.25
Total	6.25
Total for last 3 years of 8th Plan	18.75
Total	18.75 (F)
Total (A-B+C+D+E+F)	325.71

During the 8th Five Year Plan period requirements have been projected to the extent of Rs. 400.00 lacs representing salary, allowances, office expenses, other charges etc. as per details given hereunder.

(4) Procurement of Machinery and Equipment—(Rs. 600 lacs)

The courses which are taken up and proposed to be taken up by this Institute need various machinery and equipment for which Rs. 600 lacs has been kept during the 8th Plan. Some details are given below. The details are only indicative and not exhaustive about Labs. and Equipment.

I. NAME OF THE LABORATORY CAD/CAM

(A) Targets

1. To make the computational power available to all the students and faculty members easily.
2. To train the students in the latest environment using the latest computational tools.
3. To develop utility tools.
4. To train the students in trouble shooting the Computer Hardware.

(B) Justification

The number of students and faculty members at DIT is increasing. With the induction of a new B.E. Programme in Instrumentation & Control it has become very much essential to increase the computing power in the Institute. The total number of students is approximately 540 which is going to be increased to 900 under-graduate and 160 post-graduate students. Hence, the total number of computer users is going to be substantially increased. Keeping in view further increase in R & D activities, the requirement of computing power would be much more. Keeping these facts in mind it is very much essential for the Institute to acquire more terminals/computers urgently.

These days the Unix and the LAN are two environments very popular in the industry. A large number of tools are available on both environments. The industry needs trained manpower in both of these environment. There is a need to have another powerful Unix machine supporting atleast 30 terminals with graphic facilities. Atleast five of these terminals should be able to support advanced graphics.

To train the students in LAN environment, atleast 20 Nodes working on a LAN with tools like distributed database management system are needed.

With increasing number of very sophisticated tools becoming available for specialized areas of CAD/CAM, it requires a highly sophisticated dedicated hardware to support and develop advanced application software. Atleast 5 Nos. of 32 bit CAD workstations with a variety of CAD/CAM and AI software are needed.

In order to train students in the area of high resolution image processing, graphics and open ended high performance hardware innovation currently happening in the computer industry, atleast 5 Nos. of 486 based EISA, high resolution image processing workstations are required.

Robots & CNC machines are increasingly finding their use in the industry. It requires trained manpower to make these tools useful and more powerful for the industry.

A hardware trouble shooting facility has to be developed for in house hardware maintenance for the computer and to train the students also in hardware maintenance. Therefore the following m/cs would be needed during the VIII Plan period for this laboratory :—

(C) Some Important Equipment

1. Installation of LAN of 20 Nodes.
2. Installation of UNIX mini computer with 30 terminals.

3. Advanced Graphics terminals (5 Nos.).
4. CAD workstations (5 Nos.).
5. High Resolution Image Processing workstation (486 EISA BASED) with :
 - (i) VGA Monitor (1024 x 768 Resolution Card).
 - (ii) 32 Bit EISA high resolution graphics adaptor.
 - (iii) 32 Bit EISA Local Area Network Adaptor (five system).
6. Robots.
7. CNC machines.
8. Trouble Shooting Trainers.
9. Vision System.

(D) Financial Implication

Approximate cost of equipment : Rs. 40.00 lacs

II. Name of the Laboratory : VLSI Design Laboratory.

(A) Targets

- (1) To initiate activity in the field of VLSI Design.
- (2) To create infrastructure for interaction with the industry and other organizations.
- (3) To support courses on VLSI design to be offered to B.E. & M.E. classes.
- (4) To undertake R & D activities in this area.

(B) Justification

The impact of evergrowing chip complexities has profoundly influenced the human civilization not only on technological fronts but social and political as well. Whereas the fabrication aspects of LSI/VLSI chips are too costly and need to be undertaken by specialist agencies/industries, the expertise in design and characterization of semiconductor chips can be acquired at a relatively low cost by teaching institution. Further more, the efforts by the universities in 'VLSI Design' can be complimentary and hence useful to the industries/agencies engage in the production of such chips.

The proposed activity in 'VLSI Design' at DIT is therefore in tune with the national requirements in this area of vital importance. It is, thus envisaged in the 'Profile of Growth Document' (Dec. 1989) of DIT that this activity would receive considerable attention in Phases II & III of the overall plan. A specialization in B.E. in 'VLSI Design' is proposed in Phase II and an M. Tech. in Phase III, with the setting up of a special lab/centre in Phase II itself. In due course of time the lab would be able to support R & D Programmes as well.

In continuation of the above, it is planned to start a modest 'VLSI Design Activity' in 1990-91, which would be strengthened in 1991-92 and thereafter. After 1991-1992, an additional supporting activity in the area of 'Semiconductor Device & Chip Characterization' would be initiated. Both these activities are expected to mature by 1995, i.e. the end of Phase II. During this duration, interaction with industries/R&D organisations would also be initiated. In Phase III, this activity is expected to be on firm footing with partial support from industries and other R&D organizations of the country.

Decision about starting some activity related to the 'fabricational aspects' would be considered during the maturing of the 'Design and Test' activity at an appropriate time.

(C) Some Important Equipment

1. PC ATs (386/486 based) with networking and high Resolution Graphics Terminals	4
2. U P S (Uninterrupted Power Supply)	1
3. Software VINYAS from ITI	1
4. Printer	1
5. APPOLLO/SUN work station of equivalent	3
6. Plotter	1
7. Software options	
(i) Professional (VTI/Mentor)	
(ii) Other Sources	
8. Infrastructure/Misc.	

(D) Financial Implication

Approximate cost of equipment -- Rs. 30.00 lacs

III. Name of Laboratory : Expert System Laboratory

(A) Targets

1. To make the teaching of various courses truly computer oriented.
2. To make a dent into vital areas like Artificial Intelligence, Expert Systems and Robotics.
3. To meet the Computer time requirements of all the theory and laboratory courses.
4. To undertake consultancy work.

(B) Justification

For making the teaching of various courses truly computer oriented it is desirable to develop and test related software. For this purpose an exclusive use of IBM model PC/XT micro computer system will be highly desirable.

For some lecture courses there are associated laboratory courses. For others there are no such laboratory courses. However to give computer orientation students have to be assigned problems requiring considerable amount of computer time. In assessing the computer needs this aspect needs to be properly considered. The computer time requirements are much beyond the prescribed laboratory hours. It is suggested that the present computer facilities be augmented by mini system comprising two Microvax II or IIS. This will enable proper attention being given to areas like Artificial Intelligence, Expert Systems, Robotics, consultation to industry besides fulfilling additional computer time requirements indicated earlier.

(C) Some Important Equipment

- (i) IBM Model PC-XT/AT micro-computer system.
- (ii) Microcomputer system comprising of Microvax IIS or IIS.

(D) Financial Implication

Approximate cost of equipment —Rs. 20 lacs

IV. Name of the Laboratory : Digital Lab.

(A) Targets

1. Computerization of Digital Lab. and most of the experiments.
2. Use of Amaze and Palasm software for the designing of Digital Ckts.
3. Designing and fabrication of various microprocessor based projects. Using microprocessor development system (MDS) for the analysis of the above designed ckts and the use of latest debugging aids like : Signature analyzer.
4. Purchase of various latest technical softwares.
5. To promote R & D activities.
6. To pursue further studies.

(B) Justification

In this year, PC's are going to be procured by the Institute. The plan is to computerize the whole Digital Lab. Computers and various softwares like Amaze, Palasm will be used for conducting most of the experiments. PAL devices and PAL programmer will be used for practical implementation of above mentioned softwares.

The second target set for the lab. is to make it sufficiently equipped for the students to design sophisticated and reliable printed ckt boards. For the design and testing the boards, soldering stations, probes, multimeters, automatic test equipment, various components etc. are required. This will also help to create the infrastructure for research and development activities in the lab.

(C) Some Important Equipment

- | | |
|--------------------------------------|---|
| 1. Oscilloscopes with IEEE Interface | 4 |
| 2. Laser printer | 2 |

3. Air Conditioners	4
4. UPS	5
5. PC (AT with Printer)	5
6. PC's Extension Units	4
7. Signature Analyzer	1
8. Function Generator	8
9. Digital Storage Oscilloscope etc.	1
10. PCB Fabrication unit	1
11. DIP soldering machine	1
12. Wave soldering machine	1
13. Technical Software	4
14. Digital Multimeters	10
15. Digital with IEEE 488 interface	5
16. Bread boards with control unit	20
17. Power supplies	20
18. Bread boards for microprocess based projects	20
19. ADD on cards	20
20. Pneumatic Drillers	4
21. Ultra violet erasers miscellaneous item Displays, Probes, Pulsers, various components, cables	8
22. Hook up wires, component racks patch cards	
23. Various tools like cutter, pliers, screw driver, soldering stations	
24. HDL Software	2
25. Automatic Test Equipment	2
26. Various components like pal devices, IC's, microprocessors etc.	

(D) Financial Implication

Approximate cost of equipment

—Rs. 20.00 lacs

V. Name of Laboratory : Linear Integrated Circuits Lab.

(A) Targets

- (1) To update the facilities created in the Linear Integrated Circuits Lab. for the course on Bipolar and MOS Analog ICs being offered to VI Sem. BE (EC) students.
- (2) To strengthen the work being done towards making computer simulation an integral part of practical works in all the courses related to Linear Electronic Circuits.
- (3) To prepare the LIC Lab. to have a number of fully automatic PC-controlled test benches.
- (4) To update the research facilities created in the LIC Lab. and to undertake consultancy and sponsored R & D projects.

(B) Justification

Apart from supporting the course on Linear ICs offered to BL V Sem. in ECE, COB and ICE, to support the requirements of the hardware and simulation experiments pertaining to the course on Bipolar and MOS analog ICs is an important programme of the Lab.

By the efforts made in the previous years the Lab. has some facilities to carry out simulation and computer aided analysis using the available softwares. Hence, in this period the main emphasis would be on creating adequate facilities for experiments pertaining to the characterization of semiconductor devices and circuits related to the course on Bipolar and MOS analog ICs i. e. on the hardware implementation aspects of the material being covered in this course.

An important activity of the LTC Lab would be to fully integrate various IEEE-488 controllable equipments (such as programmable voltage and current sources, synthesizers, digital LCRQ meters, power supplies, DSOs etc.) with PCs to create a number of fully automated test benches. Apart from creating an advance instrumentation facility, this exercise is believed to have a significant educational value as this would expose the students to the ideas of PC-controlled instrumentation.

Presently, the Lab has the basic infrastructure to carry out advance research work in a variety of areas related to Linear ICs, Circuits and Systems and Electronic Instrumentation. However, these facilities are to be upgraded to make the Lab. self sufficient to give further impetus to the ongoing research activities of the Lab.

The targets defined above are hence justified in the light of above programme and requirements.

(C) Some Important Equipment

1. Network/Spectrum Analyzer	1
2. Programmable Curve Tracers	1
3. Arbitrary Waveform Generator	1
4. Programmable Digital LCRQ meter	2
5. Low cost curve tracers	5
6. PC ATs	5
7. Softwares	
(i) PSPICE ver 5.00	5 copies each
(ii) SWITCAP	
(iii) Genesis	
(iv) Schematics	
8. Semiconductor parameter analyzer	1
9. Programmable Digital LCRZ meter	2
10. Work station	1

(d) Financial Implication

Approximate Cost of equipment —Rs. 40.00 lacs

VI. Name of Laboratory : Mainframe Computer Lab.

(a) Targets

- (1) To establish networking with UNIX 386-based machines already existing.
- (2) To establish connection with 386-SX based Novell LAN.
- (3) To implement organizational DATA BASE of DIT.
- (4) To streamline programming/software development classes.
- (5) To design case-studies for packages like PERT etc. for instruction in course related to systems design.
- (6) To establish point-to point link with VME-based mainframe ICIM-6080 at IIT Delhi.

(B) Justification

This Institute has to build a major thrust in the area of Computers. This Programme is specially needed to strengthen the Computer Application Programme.

(C) Some Important Equipment

- | | |
|--------------------------------|---|
| 1. Cables, junction boxes | |
| 2. Modems | 2 |
| 3. Expander | 1 |
| 4. High Speed Synchronous Link | 1 |
| 5. Gateway | 1 |
| 6. Maintenance | |

(D) Financial Implication

Approximate cost of equipment —Rs. 20.00 lacs

VII. Name of Laboratory : Advanced Microprocessor Lab.

(A) Targets

- (1) To develop VCR to PC/AT interface
- (2) To develop CCD camera to PC/AT interface
- (3) To develop PC/AT to VCR interface
- (4) To develop Digital IC tester

(B) Justification

This Lab. is intended to provide basic infrastructure to facilitate development of specialised projects mentioned above and subsequently, to become a centre where activities concerning microprocessor research and training could be undertaken.

(C) Some Important Equipment

1. Digital Storage Oscilloscope	2
2. Logic analyser	—
3. Ethernet cards	—
4. Multiprocessor architecture modules	—
5. Visual, pressure and force sensors	—
6. Motion actuators	—
7. Soldering and desoldering equipment	—
8. A PCB manufacturing set-up	—
9. Software for sensors and actuators	—

(D) Financial Implication

Approximate Cost of equipment —Rs. 10.00 lacs

VIII. Name of Laboratory : Microwave Lab.

(A) Targets

It is essential to augment the laboratory to

1. cover additional experiments to provide comprehensive training to students (A minimum number of 60 students would be trained at the BE level alone per year);
2. build up projects to provide better training and skill upgradation facilities for staff as well as students;
3. take up R & D activities to build up the expertise for taking up design and development of active as well as passive microwave circuits/system;
4. build up industry interaction to provide service in terms of development and testing as well as training;
5. build up expertise to provide consultancy service;
6. build up the infrastructure to take up projects, to carry out R & D activities in the Microwave area;
7. provide support to various courses at the under-graduate as well as post-graduate levels in the general area of Microwave Engineering as a result of above activities ; and
8. build up linkages with R & D Laboratories and Academic Institutions such as NPL, SSPL, IIT-Delhi, CEERI, CDOT.

(B) Justification

The present facility covers only limited number of experiments for the students. In order to provide comprehensive training to the students and also to provide them a good exposure, about the various facts in the overall area of Microwave Engineering, it is essential to suitably augment the laboratory. This requires procurement of various equipments & accessories so that after suitable training of staff, they are able to build up the necessary expertise to enable them to provide

the required support and guidance to the students, advise students to take final year projects, take up R & D projects and build up the necessary expertise to promote industry interaction etc.

The additional necessary experiments required to be introduced in the laboratory include measurement of dielectric constant, S parameters, Noise Figure, Q factor. It is also necessary to have time domain facility for measurements in the Microwave Region. It is also necessary to and build up expertise in the L, S, C, X and Ku bands of frequencies. Students need to be exposed to various microwave solid state as well as tube devices in addition to the various microwave passive components.

The Microwave laboratory would also cover facilities in the area of transmission lines, communication engineering, microwave generation and detection. With the use of powerful PCs, the design of microwave circuits has also become relatively easier and it is for this reason that the students as well as staff need to be exposed to this powerful art so as also to build up the expertise in this area. This expertise would also be utilized for training of personnel working in various Govt. agencies like Defence, Telecommunication in this important area where there is more and more scarcity of trained personnel.

Some of the equipment/accessories required to be procured include the following :—

1. RF Plug-in units for the Network Analyser (already procured) to cover frequencies in the lower as well as in the upper region.
2. Field installable upgrade kit (time domain capability)
3. Power Meters
4. Dielectric Measurement set up
5. Plotter
6. Printer
7. High Frequency Oscilloscope
8. Microwave Spectrum Analyser
9. Microwave Noise Measurement set up
10. Microwave Frequency Counter

Some of the required accessories also include calibration kit, verification kit, cables, connectors, adapters, IB cables. It would be desirable to have built-in flexibility so as to keep on adding/deleting equipment depending up technological trends, within the overall sanctioned budget.

(C) Some Important Equipment

1. Power Meters
2. Frequency Counter
3. Spectrum Analyzer
4. Noise Figure Measurement Equipment
5. Plug-in units

6. Time Domain Capability
7. High Frequency Oscilloscope
8. Low Frequency Oscilloscope
9. Dielectric Measurement Equipment
10. Plotter
11. PC—At & Printer
12. Miscellaneous items like calibration kit, verification kit, cables, connectors, adapters, sensors etc.

(D) Financial Implication

Approximate cost of equipment —Rs. 30.00 lacs

IX. Name of the Laboratory : Physics Lab.

(A) Targets

1. Expansion and Modernization of Physics Lab.
2. Implementation of Computer based expt.
3. Introduction of LASER based expt,
4. Introduction of Superconductivity expt.
5. Development of research facility

(B) Justification

Modernization of Physics Lab. is required to develop the scientific aptitude of the students and to complete with the other Institutions of national and international fame. For IBM-PC microcomputer system and some software will be required for expansion and implementation of computer based experiment.

(C) Some Important Equipment

- | | |
|---|---|
| 1. IBM PC (At) microcomputer system alongwith printer and plotter | 4 |
| 2. Software related to physics course | |
| 3. LASER based expt. complete set with all accessories | 2 |
| 4. Superconductivity based expt. | |
| (i) Superconducting electromagnet | 1 |
| (ii) Liquid Nitrogen Unit | 1 |
| (iii) Accessories related to superconducting expt. | |
| 5. High pressure generating unit | 1 |
| 6. X-ray unit & spectrometer | 1 |
| 7. LASER holography unit | 1 |

(D) Financial Implication

Approximate cost of equipment —Rs. 20.00 lacs

X. Name of Laboratory : Electrical Engg. Lab. and Workshop

(A) Targets

1. To set up experiments related to Electrical Measurements courses.
2. To improve the 'Electrical Engg.' and 'Machines' Labs.
3. To complete setting up of 'Electrical Workshop'.

(B) Justification

Presently the Measurements Lab. is conducted at DCE, causing lot of inconvenience to the students & faculty. It is highly desirable to have an independent 'Measurements Lab.' established at DIT.

In keeping pace with the policy of the Institute to introduce computer simulation as an integral part of experimentation in all the course, it is intended to design computer-oriented experiments in the Electrical Engineering and Measurement Labs. also.

The work on setting up of 'Electric Workshop' is already in progress. Additional resources are required for enhancing the existing facilities.

(C) Some Important Equipment

(i) LCR Meter Digital type auto balance	1
(ii) A.C. Potentiometer (student type)	1
(iii) LCR meter for experimental work	1
(iv) Null Detector	2
(v) CROs	6
(vi) Calibrator	1
(vii) Components for fabrication	1
(viii) Oscillators	3
(ix) Power supplies	3
(x) Multimeters	4
(xi) Lloyd-Fisher Magnetic	1
(xii) IBM Compatible PC AT's	4

Multirange AC/DC meters fixed & variable resistors
Variable & fixed inductive loads Synchronous alternator
DC Motor Generator sets CROs.

(D) Financial Implication

Approximate cost of equipment —Rs. 10.00 lacs

XI. Name of Laboratory : Micro Computer Lab.

(A) Targets

- (1) Upgradation of existing ICIM Quattro's to Unix Terminals.
- (2) Networking of these terminals with ICIM mainframe system.
- (3) To enroll for P.H.D. Programme.

(B) Justification

Good Software package are not available for ICIM quattro's, As a result students are very much handicapped to do good jobs on the existing PC's. Hence, the existing quattro's can be upgraded.

(C) Some Important Equipment

- | | |
|--|----|
| (1) Upgradation of existing quattro's to Unix Terminals and their connectivity with ICL 6080 | 20 |
| (2) CAD Workstation | 1 |
| (3) Software Compilers etc.
(C++ Latest Version) | |
| (4) Laser Printers | 3 |
| (5) Latest Software on CAD | |
| (6) Latest Software on new AI | |
| (7) Latest Software on new compilers | |
| (8) Computer Stationery | |
| (9) Printer Ribbons/Diskettes | |

(D) Financial Implication

Approximate cost of equipment —Rs. 30 lacs.

XII. Name of Laboratory : Consumer Electronics Lab.

A. Targets

- (1) To improve laboratories facilities in the fields of industrial and consumer electronics.
- (2) To cater to the requirements of U.G. and P.G. in consumer electronics.
- (3) To take up STEP and to provide infrastructures for industrial consultancy.

(B) Justification

The proposed action plan is meant to cater the needs of B.E. programmes in Instrumentation and Control Engineering for the subjects (i) Industrial and (ii) Consumer Electronics.

(C) Some Important Equipment

1. P.C. ATs with networking, high resolution, graphics and other facilities	5
2. Plotters	4
3. Video systems—TV's i.e. BW and Colour TV HDTV	3
4. Video Camera, VCR	1
5. Recording Systems	
6. Test and Measuring equipments assorted	
7. Switching Systems for telephone exchanges (Trainer Kit)	
8. Special Test equipments.	set
9. Assorted multimeters etc.	2
10. Replacement & Consumables.	

(D) Financial Implication

Approximate cost of equipment —Rs. 20.00 lacs

XIII. Name of Laboratory : Fibre and Optical Communication Lab.

(A) Targets

- (1) To initiate activity in the field of fibre and optical communication.
- (2) To cater to the needs of UG and PG programmes in these areas.
- (3) To create infrastructure for collaboration with other institutions/organisations working in this area.
- (4) To undertake R & D activities in this area.

(B) Justification

The proposed laboratory will be developed to cater to the needs of B.E. and M.E. programmes, to conduct research and development in the area in joint collaboration with DOE. While a lot of work has been done in developing Optical Fibres with low loss, a lot of work remains to be done on terminal equipment. As the bandwidth of Silicon chips is limited, GaAs chips would be used to obtain higher bandwidth in the terminal and repeater systems. Furthermore, the centre would work on Digital Communication, Coherent and Non-Coherent Receiver Block Coded signalling, Error Control Coding Modulation Techniques, Solid State Lasers, Detectors, GaAs high speed circuits, Multiplexing/Demultiplexing Techniques, Low-loss Fibers and related topics. Emphasis would be given to practical aspects of the technology and laboratory experience.

(C) Some Important Equipment

1. Electrical to optical and optical to electrical convertors
2. Optical oscillators
3. Laser diode sources
4. Laser diode/pumped & Q-switched mode
5. IR diode laser
6. Diode linear array (10W, CW)
7. Pulse laser diode (25-100 W output)
8. DC controlled Radiometer
9. Digital photometer/radiometer & probes
10. High accuracy laser powers meters
11. Spectrometer following upto 3 graftings
12. Instrumentation systems for optical measurement
13. Spectrum analyser (high quality)
14. Electro-optic, rotators' & Isolators
15. Low risetime photomultimeter
16. Low-noise micro laser
17. Optical and Lock in Amplifiers
18. Helium Neon, Argon Lasers
19. Compact CO₂ lasers
20. Tunable diode lasers
21. Thermo-electronic cooling system for lasers
22. Vacuum pumps
23. Laser pumps
24. Optical monitor and tapping systems
25. Optical power and Joule meters
26. Programmable Power supplies
27. Miscellaneous equipment.

(D) Financial Implication

Approximate Cost of equipment — Rs. 20.00 lacs

XIV. Name of Laboratory : Artificial Intelligence and Robotics (AI & Robotics)

(A) Targets

1. To support UG and PG courses in this area.
2. To develop prototype of Advanced Robots.
3. To create infrastructure for interaction with the industry and other organizations.

(B) Justification

The Centre will be created to build prototypes of Advanced Robots to be used for computerized factory, automation systems, remote operation in nuclear power stations, coal mines, deep-sea operations etc. The Centre would take up projects from automobile and other industries/R&D organisations and will work closely with the proposed Center for Microprocessor Application. The Center will also participate in the PG programme in Artificial Intelligence.

(C) Some Important Equipment

1. Various types of Robots
2. Sensing equipment
3. Vision sensing
4. Adept vision systems
5. 7 Axis machine
6. Emulators
7. Supervisors
8. Val Generators
9. Work stations
10. Softwares

(D) Financial Implication

Approximate Cost of equipment

— Rs. 20.00 lacs

XV. Name of Laboratory : Workshops

(A) Targets

Setting up a modern Workshop for instruction and fabrication of projects.

(B) Justification

The three engineering disciplines of the Institute give opportunities to the students to engage in projects to fabricate useful items like.

Instruments flow meters, gauges
pressure transducers, semi conductor
devices accelerometers.

There is also a need to integrate electronics into the design of such instrumentation. In addition, the students need exposure to different manufacturing processes so that they develop a practical bent of mind which is essential for their future development as entrepreneurs.

(C) Some Important Equipment

- | | |
|-----------------------------------|----|
| 1. Centre Lathes with accessories | 10 |
| 2. Hydraulic Power Hackshaw m/c | 1 |
| 3. Bench Grinder | 1 |

4. Bench Drilling Machine	1
5. Portable Drill 1/4"	2
6. Portable Drill 1/2"	2
7. Universal Milling Machine with Accessories	2
8. Shaper	2
9. Brazing and Braze Welding equipment	
(a) Gas Furnace	1
(b) Electro Furnace	1
(c) Oxy acetylene torche	6
(d) Oxy hydrogen torche	6
(e) Chemical cleaning	1
(f) Electric Brazing (Resistance)	2
(g) Electric Brazing (Induction)	2
10. T.I.G. Welding equipment for welding Ferrous and non-ferrous metals suitable for welding thin gauge sheets alongwith accessories	1 set
11. M.I.G. Welding equipment for welding ferrous non-ferrous metals suitable for welding heavy metals alongwith accessories.	1 set
12. CNC Traner Lathes	5
13. Universal CNC Turning Centre with accessories	1
14. Miscellaneous hand tools	
15. Spot Welder	
16. Butt Welder	
17. Carbon Arc Welder	
18. Laser Welder	
19. Electron-beam Welder (all basic type mainly for training with appropriate production capacity for project)	
20. Wire drawing machine	
21. Foil drawing machine	
22. Lathe for metal spinning Measurement Guages for Surface and Angle Measurement Including	
23. Microscope	2
24. Sine bar	1

25. Surface Guage	1
26. Optical Flats	2
27. Snap Guage	1
28. Plug Gauge	1
29. Dial Indicating Guage	1
30. Electronic Guage using transducers	1
31. Miscellaneous hand tools and Guages (advanied)	

(D) Financial Implication

Approximate Cost of equipment —Rs 30 lacs

XVI. Name of Laboratory : Communication & Single Processing (CASP) Laboratory.

(A) Targets

1. Procurement of Test & Measuring Equipment to set up 8 Experimental benches.
2. Procurement of Computer Aided Instruction/Learning packages for all the experimental offered to students.
3. Procurement of basic equipments for research purposes in the areas of Digital Communications and Signal Processing.
4. Strengthening of the infrastructure of the lab. for running under graduate courses.
5. Procurement of equipments for project works undertaken in the lab. by final year B.E. students.
6. Procurement of equipments for carrying out research in the area of Digital Communication, Signal Processing & Data Network.

(B) Justification

The main objective in this five year plan is to equip the lab. with an infrastructure of equipments, reading material, and visual/audio self-learning aids to students in understanding the fundamental concepts in the emerging important areas of communication and signal processing and to provide research facilities in these areas to students and faculty. During this period the major efforts would primarily be diverted to the procurement test and measurement equipments, computer Aided Learning packages that lucidly help students in grasping the concepts fundamental to the areas of communication and Signal Processing. Also, in the same period efforts would be made to procure equipments and reading material that provide support to student undertaking projects in these areas in their final year course work. Besides strengthening this infrastructure efforts would be aimed at equipping the lab. with hardware research facilities so that research and consultancy works from outside agencies could be undertaken in the lab.

(C) Some Important Equipment

1. Modulation Analyser
2. Frequency & Time interval Analyser
3. Computer Aided Test/Development Tools for VXL Bus System
4. Computer Peripherals

5. Distortin Measurement Analyser
6. Dual Channel Dynamic Signal Analyser
7. Low Cost Hand-Held Camera with Accessories
8. Transient Digitizing Oscilloscope
9. Logic Analyser Tester
10. Circuit Board, Functional Testing Equipment
11. Modulation Meters
12. AM/FM Signal Generators (10K to 1G Hz)
13. Radio Test System
14. Cellutar Radio Test System
15. Thermoelectric Power Meters
16. Digital Frequency Meter
17. Programmable Sweep Generator
18. PCM Digital Testers
19. PCM Multiplex Tester
20. White Noise Test Equipment
21. DC Voltage Standard
22. IEEE-488 Interface Card & Software
23. 6-1/2 Digital Multimeters
24. Digital Thermometers
25. Power Supplies
26. Bench Top Timers/Counters
27. Synthesized R_F Generators
28. Multimeter Accessories
29. 4-Channel Oscilloscopes
30. Ethernet Cards
31. Signal Processing Chips
32. Freq. and Time Standards
33. Data and Voice Communications Test Equipment
34. Pulse Generators
35. Channel Access Switches
36. CAI
37. Spectrum Analyser
38. Vector Signal Generator
39. Modulation Analyser
40. Data Acquisition Systems
41. Eye Pattern Analyser
42. Digital Communications Systems (Eqpt. Set Up)
43. Equipment Software
44. Components/Accessories

45. Waveform Digitizer/Acquisition Equipment
46. Digital Oscilloscopes
47. Function Generators
48. MODEMS
49. Equipment Software
50. Personal Computers
51. Protocol Analyser

(D) Financial Implication

Approximate Cost of equipment — Rs. 40.00 lakhs

XVII. Name of Laboratory : Digital Signal Processing Lab.

(a) Targets

- (1) To create facilities for processing digital signals.
- (2) To support the courses on Signal Processing and Digital Signal Processing-I and II, being offered to the BE students and thereafter for ME students.
- (3) To have the facilities required for analysing 1-D signals, 2-D images/pictures and 3-D signal processing.
- (4) To undertake R & D activities in the area of signal processing.

(B) Justification

Information transmission and retrieval basically involves processing of various signals. For this, it is necessary to analyse the signals at various stages so as to design the desired subsystem with necessary accuracy. Usually for improvement/refinement of various processes, it becomes necessary to transform the signals to a convenient workable domain for efficient examination. There is thus a need to have the facilities for obtaining Fourier transform, Hilbert transform, phase shifting, differentiation, integration, pulse shaping, filtration, expansion and compression etc. of the signal for various operations in signal processing.

In the recent years, the use of digital computers has become indispensable for efficient and fast processing of the information. Analog signal is first converted into digital samples and these samples are thereafter handled by a digital computer. Digital Signal Processing (DSP), DSP-I and DSP-II, are taught in the BE courses. The need for a Signal Processing Lab. is being felt since long, since only by having worked practically can the students digest the otherwise abstract ideas of DSP. It is absolutely essential, therefore, to set-up an SP Lab. at DIT so as to impart the knowledge of analog and Digital Signal Processing to the undergraduate students. The facilities would be expanded to ME level and to cater for the R&D requirements thereafter.

(C) Some Important Equipment

- | | |
|--------------------------------------|---|
| 1. Programmable Function Generators | 5 |
| 2. Digitizing Signal Analyzers | 5 |
| 3. Logic Analyzers | 5 |
| 4. Digital Signal Processing Systems | 4 |

5. Image Processing Systems	2
6. Digital and Analog Storage Oscilloscopes	6
7. 2.0 GHZ Timer/Counters	6
8. Digital Multimeters	4
9. PC-AT with 80486 and 80487 coprocessors	6
10. Dot-matrix Printers	6
11. Laser Printer	1
12. Plotters (X-Y)	3
13. Spectrum Analyzers	2
14. Multichannel high resolution multimode Acquisition Systems	3
15. PC-based Education/Lab. Trainers	2
16. PC-based Data Acquisition DSP Systems	2
17. Servo-controlled Voltage Stabilizers	2
18. UPS with battery back-up	10
19. Miscellaneous supporting equipments	

(D) Financial Implication

Approximate cost of equipment —Rs. 30.00 lacs

XVIII. Name of Laboratory : Control System Lab.

(A) Targets

1. To improve laboratory facilities in the field of Control Systems/Control Engineering.
2. To create infrastructures for industrial liaison.

(B) Justification

The proposed plan is designed to meet the needs of B.E. programmes in Control Systems, Control Engineering and Process Control, Computer Control of Systems and Internal Control.

(C) Some Important Equipment

1. Closed loop flow Control System	1
2. Distributed Control System (Training Kit)	2
3. PC AT's with networking and high resolution facilities and printers	5
4. Programmable Function of Generators	6
5. Long Persistence Oscilloscopes	6
6. Multimeters assorted	
7. Air Conditioners	4
8. Angular Speed Control Trainer	2
9. Syncho Receiver/Transmitters	2
10. Frequency Response Study Kit	2
11. Pneumatic Trainer Kit	4
12. Computer operated pneumatic trainer	2
13. Programmable Logic Controller Kit	2

- | | |
|--|---|
| 14. Assorted Servo Components | |
| 15. Test Instruments | |
| 16. Electro Hydraulic servo trainer kit | 2 |
| 17. Gil Hydraulic trainer kit | 2 |
| 18. Process simulator | 2 |
| 19. Trainer kit for a light process industry like Food and Dairy | 2 |
| 20. Consumables and replacements | |

(D) Financial Implication

Approximate cost of equipment — Rs. 25.00 lacs

XIX. Name of Laboratory : Instrumentation Lab.

(A) Targets

1. To upgrade existing Instrumentation Laboratory.
2. Devise computer aided teaching modules in the field of Instrumentation and Control
3. To give impetus to STEP activities

(B) Justification

The proposed action plan endeavours to provide laboratories facilities for B.E. programmes in (i) Medical Instrumentation (ii) Power Plant Instrumentation (iii) Computer Controlled Instrumentation and Environmental Instrumentation.

(C) Some Important Equipment

- | | |
|---|---|
| 1. Electro Cardiographic Instrumentation | 2 |
| 2. Vector Cardiographic Instrumentation | 4 |
| 3. Ultra Sonographic Medical Instrumentation | 4 |
| 4. Industrial and Biosensors and Transducers | |
| 5. Oscilloscopes | 6 |
| 6. P.C. ATs with Printers | 2 |
| 7. Recorder and Controllers (Industrial and Medical) | 6 |
| 8. Microprocessor based and intelligent Instrumentation | |
| 9. Power Plant Instrumentation | |
| 10. Micrometeorological Laboratory with Air Pollution, Land Pollution and Water Pollution Test facilities | |
| 11. Industrial Pollution Instrumentation | |
| 12. Consumables and replacement | |

(D) Financial Implication

Approximate cost of equipment —Rs. 30 lacs.

XX. (a) Name of Laboratory : Unix Lab.**(A) Targets**

- (1) To provide intelligent terminals to all the faculty members.
- (2) To train the manpower on the Unix usage.
- (3) To develop distributed data processing environment with Graphical User Interface.

(B) Justification

- (i) With the fast advancement taking place in Computer Industry, it requires continued effort by the faculty members to update their theoretical as well as practical knowledge. An intelligent terminal to Unix M/c will serve as a great tool for the faculty of Computer Engineering Department.
- (ii) India and the World at large has standardised on Unix on the operating system both for scientific and commercial environment. India trying very hard to increase its software exports shall have to train its manpower in the usage of standard operating system.
- (iii) So no indogenous product is available in the market which can be used for distributed data processing. By developing this product and making it available to the Indian users through proper channels at low cost, a large amount of foreign exchange can be saved.

(C) Some Important Equipment

- (i) Upgradation of Unix Hardware & Software.
- (ii) Intelligent Terminals to faculty.

(D) Financial Implication

Approximate cost of equipment --Rs. 30.00 lacs

(b) Name of Laboratory : Supermini Computer Lab.

(A) Targets

1. To facilitate learning of latest computational tools in a multiuser environment.
2. To promote research of the faculty as well as ME/Ph. D students.
3. To gain access to the international e-mail system.
4. To develop Unix-based software systems.

(B) Justification

There is a progressive growth in the population of students and teachers at DIT Delhi. In addition to the increase in the students intake at the undergraduate level, there will be a total of 160 (one hundred and sixty) students in the five streams of the proposed two year ME programmes. The present computing facilities are likely to be insufficient and outdated in the next few years.

In view of the targets stated earlier, a **Unix-based Supermini Computer should be acquired as soon as possible.**

(C) Some Important Equipment

1. Installation of Unix-based Supermini Computer.

(D) Financial Implication

Approximate cost of equipment —Rs. 20.00 lacs

XXI. Name of Laboratory : Applied Computation/Computer Graphics

(A) Targets

1. Imparting training to Computer Engineering students in the area of Computer Graphics, Computer Vision, Expert Systems, Computer Integrated Manufacturing System and Robotics.
2. Provide research facilities to faculty & students in the above areas.
3. Take consultancy work from the Industry in the above areas.
4. Develop indigenous hardware and software in the above areas.

Some Important Equipments

1. Work Stations
2. PC ATs
3. Steriolithography Unit
4. CNC Machines
5. Non CNC Machines
6. Robots
7. Material Handling Systems
8. Utility Software
9. Standards and other books
10. Teaching aids

Financial Implication

Approximate cost of equipment —Rs. 30.00 lacs

XXII. Special Laboratories for Manufacturing Process & Automation

An allocation of Rs. 25.00 lacs is to be made for establishment of special laboratories for the new course on manufacturing process and automation engineering which is to be introduced in this plan—Rs. 25.00 lacs.

XXIII. Installation of Maintenance of Equipment

The installation and maintenance of equipments is required for the above laboratories. A sum of Rs. 10.00 lacs has been provided for the same.

The increase of intake in the existing courses and introduction of post-graduate programmes will be taken up. This will be accompanied by introducing more laboratory facilities. Year-wise phasing of Rs. 600 lacs is given below :—

1992-93	Rs. 150.00 lacs
1993-94	Rs. 100.00 lacs
1994-95	Rs. 100.00 lacs
1995-96	Rs. 100.00 lacs
1996-97	Rs. 150.00 lacs
Total :	<u>Rs. 600.00 lacs</u>

5. *Setting up Centre for Electronics Design and Technology (CEDT)—(Rs. 40.00 lacs)*

The Department of Electronics, Govt. of India vide letter No. 25(14)/89/MP/I dated 1-9-1989 suggested that the Delhi Institute of Technology may establish a Centre for Electronics Design and Technology in the Union Territory of Delhi, as availability of trained manpower in adequate numbers, would be one of the pre-requisites for further growth of Electronics. For this purpose, it has been contemplated that the Delhi Admn. should provide suitable piece of land for buildings and accommodation facilities for students and staff of the Centre while 50% contribution in respect of capital as well as revenue expenditure will be met by the Department of Electronics. A project report has accordingly been prepared and submitted. According to this project report, the cost of this project as envisaged by the Department of Electronics comes to Rs. 5.00 crores. Since the Department of Electronics will bear 50% cost thereon, it is necessary to bear the remaining expenditure of Rs. 250.00 lacs by DIT. Accordingly, a sum of Rs. 250.00 lacs has been earmarked and provided under the 8th Plan as part of DIT expenditure.

The year-wise break-up is given below :—

1992-93	Rs. 2.00 lacs
1993-94	„ 5.00 lacs
1994-95	„ 11.00 lacs
1995-96	„ 11.00 lacs
1996-97	„ 11.00 lacs
Total :	<u>Rs. 40.00 lacs</u>

6. *Setting up of Science & Technology Entrepreneurship Park (STEP)—(Rs. 50.00 lacs)*

The Government of India has been taking quite a few measures to promote entrepreneurship among science, technology and engineering graduates in our country. Equally important issue is to convert the Technical Human Resources into a regenerative unit which would speed up industrialization and thereby bring in more employment and prosperity. One such measure that is being thought of today, is to establish

Science and Technology Entrepreneurs Park (STEP). It is mainly intended to encourage science and engineering commercial ventures based on research and developmental work conducted by R&D as well as academic institutions. (This concept is based upon success of STEP activities in other countries).

Delhi Administration is in the process of putting up a Science and Technology Entrepreneurs Park in the close vicinity of the Campus of DIT. The Department of Industries, Delhi Administration, Department of Science and Technology, Govt. of India, Industrial and Financial Institutions as well as DIT will be actively associated with this project. STEP will be registered as a society and managed by a broad based Managing Committee. STEP will initially concentrate on the following thrust areas :

- (i) Microprocessor Application,
- (ii) Computer Application,
- (iii) Digital Instrumentation,
- (iv) Electro-medical Instruments.

The major objective of STEP is to create an element of trust and confidence among Academic/Research Institutions, Financial Institutions and Industrial Enterprises. The STEP is expected to bring about a sort of interaction & interfacing between Educational/Research Institutions on the one hand and Industrial Units on the other. The basic concept is that STEP would assist in translating the research and developmental outputs from the institute into industrial production, effect changes in industrial processing and also in improving the quality of the product. Besides encouraging fresh graduates to become engineer-entrepreneurs, the STEP may simulate the existing industries also to take to induction of latest scientific and technological knowhow.

STEP shall devote its attention not only to transfer knowhow to the industries but also to encourage technical graduates to take entrepreneurship. It is proposed to provide certain infrastructural facilities and act as a sort of consultancy organisation providing guidance and assistance to the prospective entrepreneurs on technical, financial, commercial and managerial aspects. STEP will also provide assistance to the scientists/engineers entrepreneurs in getting financial assistance from leading agencies and also arrange marketing tie ups for the outlet of their products. STEP can help the entrepreneurs by providing proper guidance in technology assessment, technology evaluation, technology upgradation, diversification, avoidance of investment in wrong places ect.

The Institute (DIT) would spot the young talented entrepreneurs, during their educational career, who believe in innovation, creativity and business and are capable of taking risks, and nurture them to grow as potential employers. These entrepreneurs would stay in the park for 3 to 5 years during which the initial problems are expected to be overcome and then they will migrate elsewhere in order to make room for new entrepreneurs. Thus, we hope to open a new vista for our engineering graduate so that they can become a source for generation of products and services to the society and a source of generation of wealth and employment instead of swelling the queue of job seekers.

This project is supposed to be undertaken in co-operation with the Department of Science and Technology, Govt. of India.

	(Rs. in lacs)
Non-Recurring Expenditure	260.00
Recurring Expenditure	44.00

Components on the Recurring and Non-Recurring Expenses are given below :—

(A) Non-Recurring

	(Rs. in lacs)
1. Main Building	48.00
2. Other facilities	5.00
3. (a) Development Rs. 63.00)	95.00
(b) Electrical charges Rs. 32.00)	
4. Supervision charges 8%	12.00
5. Contingencies 3%	4.00
6. Vehicles	2.50
7. Machinery Equipment	40.00
8. Installation charges 15%	6.00
9. Cost of 5 acres of land @ Rs. 9.50 lacs per acre	47.00
Total	260.00

Recurring

The expenditure is proposed to be met from the State Plan Fund of the Union Territory of Delhi and grant-in-aid from the department of Science and Technology, Government of India. The staff component is mentioned below :—

S. No.	Designation	No. of Posts	Pay Scale Rs.
1.	Co-ordinator	1	4500-7300
2.	R & D Chiefs	2	4500-7300
3.	Project Leaders	3	3700-5700
4.	Sr. Scientific Officers	4	2200-4000
5.	Accounts Officer	1	2375-3500
6.	Foreman	2	2000-3500
7.	Sr. Technical Asstt./PA	2	1640-2900
8.	Technical Asstt./Draftsman/Mechanic/Operator Diemaker/Fitter/Mechanic Welder/Carpenter/ Painter/Office Asstt./Cashier/Store Keeper/ Typist/Driver	20	1400-2300
9.	Helper/ Watch & Ward/Peon/Gardener	5	750-940

Recurring Expenses

	<i>(Rs. in lacs)</i>
1. Salaries and wages	18.51
2. Material and stores	4.50
3. Conveyance & Transport	3.50
4. Office & Administrative	6.50
5. Maintenance Expenditure	4.99
6. Ground Rent @ 2-1/2 %	6.00
Total	<u>44.00</u>

The Institute will need provision of the estimated overall requirements. The balance will be met from Grants-in aid from the Deptt. of Science & Technology, Govt. of India.

Overall Requirement

	<i>(Rs in lacs)</i>
Non-recurring Funds	260.00
Recurring Funds (per annum)	74.00
Total	<u>334.00</u>

In order to interface STEP with DIT, the Deptt. of Science and Technology has sanctioned creation of a small Science and Technology Entrepreneurship Cell for which a grant of Rs. 1.15 lac has been made. An amount of Rs. 2.50 lacs has accordingly been provided for 1992-93. The expenditure during the 8th Plan period will, however, be of the order of Rs. 50.00 lacs.

(7) Continuing Education Programme (CEP)—(Rs. 4.00 lacs)

A centre for extramural teaching & extension services, is being established at DIT with the support of Deptt. of Electronics (DOE) to meet the following objectives :—

- (1) Development of innovative courses, educational softwares, design of curricula, continuous evolution of methodology for integration of physical laws with Design, Guarding against obsolescence of laboratories and courses, simulation experiments etc.
- (2) Training of teachers in various Engineering Institutes for improving their effectiveness in teaching specialised courses in the areas of Electronics, Computers, Instrumentation, Communication, Information Technology etc.
- (3) Training of teachers in various Science Colleges and Polytechnic for improving their effectiveness in teaching specialised courses in the areas of Electronics, Computers, Instrumentation, Communication, Information Technology etc.

- (4) Updating knowledge base of practicing Engineers, Managers and Executives working in different industries contributing to the field of Electronics, Computers, Instrumentation, Communication, Information Technology Integration of academic curriculum with requirements of industry.
- (5) Development of highly concentrated package for distance education for Teachers and Practicing Engineers Managers, Executives in the field of Electronics, Communication, Computers, Instrumentation, Information Technology etc.

Manpower Requirement : It will be essential to augment the strength of competent manpower in order to pursue this programme at a higher level of efficiency. This augmentation would be necessary to build a proper thrust and direction for the programme. The annual expenditure including the salary of staff, and other expenditure would be Rs. 5,52,400/- Deptt. of Electronics (DOE) has already sanctioned 90% of the expenditure for two years amounting to Rs. 9.94 lacs. It is expected that this support would be forthcoming for the rest of the plan period.

DOE Govt. of India will establish the Centre for extramural teaching & extension services by providing 90% of the requirements. Provision has been made to meet the balance of 10% requirement. A sum of Rs. 1.00 lac will be needed during the period 1992-93 which may be concurred.

Continuing Education activity has been considered quite important because of fast changing technology in the area of electronics and computers. For these reasons, there is greater emphasis on this important aspect. It is expected that this funding from DOE (and possibly also some other agencies) would increase ; this would require additional support from DIT (on the basis of 10% as in the case of DOE grant).

The Yearwise break-up is given below :—

1992-93	1993-94	1994-95	1995-96	1996-97	Total (Rs. in lacs)
1.00	1.00	1.00	0.50	0.50	4.00

8. *Library System and Book Bank—(Rs. 62.00 lacs)*

The role of library is very crucial for the development of the Institute. Library facilities will have to be quite modern. Computer based catalogue will help the researchers in locating material of their interest. Photo-copying facilities will be readily available to the library users.

In this Institute, the Library would play a crucial role. Since the thrust of DIT would be in Electronics Computers, Communications and instrumentation, its Library also should concentrate on acquiring books and journals in these areas.

While the Library should be equipped with hard copy publications based on paper of a conventional nature, every efforts would be made to acquire publications in non-paper media, such as, computer tapes, CD-Roms, Video tapes, audio tapes, micro-films, micro-fishes and the like. Accordingly, the Library must have instruments and

equipment such that users of the Library (Faculty, research scholars and students) may get access to the material stored in electronics and other media. Facilities would be provided for readers to the hard copies made as they so desire.

Even though some thrust areas have been identified for DIT's growth, it must be realised that emerging technologies are largely inter-disciplinary in nature. For instance, any scholar in bio-electronics may wish to seek access to information regarding latest research in human anatomy (say, neuro-sciences). It would be physically impossible, and indeed infructuous, for DIT to stock all publications even remotely connected with the major subjects of DIT's focus. Therefore, it becomes necessary to link DIT Library to the Delhi Library system (in which libraries such as the National Medical Library, National Science Library, Defence Science Library etc are nodes) and also to the national and international networks.

The DIT Library must also be booked on to other Net works.

While interconnection to other networks would be necessary, DIT Library would also be equipped with the following :—

- (a) Micro-film readers
- (b) PC/AT with a number of terminals and facility to read CD-ROMs.
- (c) Photo-copiers (both black & white and colour)
- (d) VCRS & TV monitors
- (e) Slide viewers
- (f) Audio Tape-recorders etc.

The design of DIT library should cater to future expansion and modification.

	Rs. (lacs)
1. Books/ Reference books	24.00
2. Journals	18.00
3. Electronic Media for Instruction	5.00
4. Back volumes for journals	7.00
5. Encyclopaedia	3.00
6. Book bank for SC-ST	3.00
7. Photocopying facilities	2.00
Total	62.00

- (i) It is proposed to build a Book Bank in this Institute to assist the needy students for supply of books to them. The Institute Library needs to be strengthened with adequate number of required books and journals etc. for this purpose.
- (ii) It is envisaged to enlarge the academic knowledge of the faculty members by updating the academic and professional skill. Therefore they need to be deputed for attending Seminars workshops, special courses, summer schools, training and industrial visits etc.

The year-wise break-up is given below :—

1992-93	1993-94	1994-95	1995-96	1996-97	Total (Rs. in lacs)
16.00	11.00	11.00	12.00	12.00	62.00

(9) *Collaboration and Faculty Development—(Rs. 6.00 Lacs)*

This Institute is in the process of establishing collaboration, for research and development activities with other Institutes, Universities, R&D organisations in India as well as abroad. This is in pursuance of the objectives No. 3 (viii) of the Institute as set out in the Memorandum of Association which reads as follows :—

- (viii) "To establish linkages between the Institute, Industries, R & D Organisations and other Universities/Institute of higher technical education for teaching and research programmes in India & abroad."

The year-wise break-up of provisions is given below :—

1992-93	1993-94	1994-95	1995-96	1996-97	Total (Rs. in lacs)
2.50	1.00	1.00	0.50	1.00	6.00

(10) *Setting up of Computer Educational Network and Project Cell (CEN) —(Rs. 10 lacs)*

The Institute is in the process of developing a co-operative programme in the following areas :—

- (i) Micro-processor Training/Application and Design/Development of Systems/Sub-systems, utilizing Micro-processors.
- (ii) Development of various types of Systems and Application softwares.
- (iii) Design/Development of Communication equipment/sub-systems/interface/terminal equipments.
- (iv) Fiber Optics
- (v) Micro-electronics design/CAD, CAI, Artificial intelligence Robotics, Computer, Architecture fifth generation computing etc.

In order to pursue this co-operative programme it is essential to establish a computer communication network between DIT and the Department of Electronics, Govt. of India. The students are required to be involved in the curriculum activity of project work which is being covered in this scheme. It is proposed to develop projects jobs which have technical and viability for ultimate development as prototype. For this purpose a sum of Rs. 10.00 lacs has been earmarked, which may be agreed to.

Year-wise break-up is given below :—

1992-93	1993-94	1994-95	1995-96	1996-97	Total (Rs. in lacs)
2.00	2.00	2.00	2.00	2.00	10.00

(11) *Awards of Scholarship/Research Associateships—(Rs. 5.00 lacs.)*

The scheme for merit/merit-cum-means scholarships is proposed to be introduced for students. Certain awards are also proposed to be extended to deserving

students. Associateship according to U.G.C. norms are also proposed to be awarded. A sum of Rs. 5.00 lacs has been earmarked which may be approved.

1992-93	1993-94	1994-95	1995-96	1996-97	Total (Rs. in lacs)
1.00	1.00	1.00	1.00	1.00	5.00

(IV) Collège of Art

The COA is an institution for advanced training in Visual Arts (both creative and applied) leading to the Bachelor of Fine Arts (B.F.A.) and M.F.A. Degree of the University of Delhi.

The College obtained the approval of competent authorities for a Master's Course in specializations like, Painting, Sculpture, Applied Art, Photography/Print Making and History of Art in the 7th Plan. Out of these six specializations, the college has since introduced Master of Fine Arts Courses only in Painting, Applied Art and Sculpture with a maximum intake capacity of seven for each. Such post-graduate courses have been taught in several Universities and Art Institutions in other parts of the country for more than decade. They have been demanded for a long time in order to meet the need of the Capital region as well as foreign countries under the cultural agreements signed by the Government of India.

Progress and achievements in this area will feed and substantially improve the manpower to provide quality for social, cultural and industrial schemes for our country.

Scheme-wise details are given below :—

- (i) *Development of existing college building and construction of Additional space in the campus of College of Art—(Rs. 134.00 lacs)*

College of Art is one of the premier institutions of the country imparting teaching and training in visual arts both at the graduate and post-graduate levels under the affiliation of University of Delhi which gives BFA and MFA degree.

University of Delhi approved six post-graduate courses in 1983 to be started in college of Art. The post-graduate board of Ministry of Human Resources & Development approved three courses in Painting, Sculpture and Applied Art which were started in the academic year of 1986-87. The remaining three courses i.e. Photography Print making and Art History are under consideration of the Ministry for approval.

There was increase of intake at under graduate level from 60 to 80 students. A centre for Computer graphics was set up last year. Recently the academic council of University of Delhi has approved a new course of Applied Design at under-graduate level to meet the pressing manpower need in this field. This course will also require studio and workshop space including computers for Design projects.

In view of these developments, it has become absolutely necessary to construct additional space in the campus. The architect has submitted the plan and estimated which have vetted by PWD.

The following action plan has been worked out for construction of new buildings :

- (i) 1992-93—Land scaping and planning of the project and construction of new building block of the college for which the land is readily available.
- (ii) 1993-94—Demolition of Central Block of the existing building and construction of the building on the land thus made available.
- (iii) 1994-95—Demolition of temporary blocks of the existing building and construction of new building on the land thus made available.

This plan for construction of New buildings in stages has been devised so that functioning of college may not be affected.

This schedule is, however, subject to the clearance of the project by Delhi Urban Art Commission and Municipal Authorities.

Financial Implication

The estimated cost of the buildings is Rs. 4.90 crore against which a provision of Rs. 1.34 crore has been made in the 8th Plan. The project will, however, be financed through inter-sectoral adjustment of financial outlays in the Revised Estimates. A provision of Rs. 25 lacs has been made in Annual plan 1992-93. This project has been approved by the Standing Finance Committee on 16-7-1992 based on PWD's estimates of Rs. 4.90 crore.

(2) *Re-Organisation of existing academic courses of studies—(Rs. 96.00 lacs)*

With the affiliation of the college to the University in 1972 it become necessary to re-organise the existing pattern of staffing so as to bring it in conformity with the approved pattern of the University. Accordingly, the existing four posts of Lecturers (ordy. Scale) which existed in the college have since been abolished and instead other posts of Lecturers, Assistant Professors created as per recommendati n of the Madan Committee followed by the Dogra Committee pay scales with matching 'Structure of staffing in respect of ministerial and other categories of supporting staff. Besides the intake capacity at B. F. A. level, which has been increased from 60 to 80 in addition to 8 reserved for Deaf & Dumb and foreigners by the end of Seventh Five Year Plan and has to be increased further considering the ever increasing demand from the profession. Apart from these, there is also an intake of 7 for each of three disciplines of M.F.A. Courses for Post Gradutes, already started since 1986.

Accordingly, the following new posts will be created and filled up during the 8th Five Year Plan for Post Graduate Courses, expansion of academic programme, restructuring of Courses according to the approved syllabus :—

		Rs.
1. Registrar	1	3000-5000
2. Asstt. Registrar	1	2000-3200
3. Store Superintendent	1	2000-3200
4. Instructor (Printing)	1	1400-2600
5. Instructor (Ceramics)	1	1400-2600

6. Instructor (Black-smith) & Welding	1	1400-2600
7. Instructor (Weaving)	1	1400-2600
8. Instructor (Carpentary)	1	1400-2600
9. Attendants	10	750-940

As soon as these posts are created the post of Administrative Officer, Assistant (Head Clerk) & Store Superintendent already filled on Non-Plan side would be surrendered.

For incorporating the professional needs, introduction of new technology and new innovations including Computer etc. have become necessary in the Art Education Programme. The Computer (DTP) costing of Rs. 4,60,400/- consists of Scanner, Post Script Laser Printers etc. has since been purchased but the proposal for purchase of hardwares/softwares Adons required for Graphic is also under consideration of the Director, NICE. The computer (DTP) system already purchased on recommendations of Director NICE is for the preliminary training of the post-graduate students. The additional demand of parallel Computers alongwith Ad-ons/consumables has also been felt to accommodate the interested students as per the programmes. The total cost of such types of Computers is to the tune of Rs. 50.00 lacs which would be purchased during the VIIIth Five Year Plan in phases.

Apart from this, the College which has inherited the equipment, machinery and furniture etc., from three to four decades Old Polytechnic and litter has to replace them now. Therefore, the College intends to purchase (i) proper furniture for Studios Workshops, Seminar Room and Assembly Hall (ii) Audio Visual Equipments, Air Conditioners and Furnishings (iii) New Equipments for Sculpture, Ceramics, Kilns, Carpentary, Smithy (Welding & Grinding) Machines, Weaving (Looms) for Mural Section (iv) for Photographic Studios, Camera-Movie, Video and Still plus Laboratory Equipments (v) for Applied Art-Coppier, Printers, Type setting equipments editing and synthesiders TV Graphics and animation kits alongwith new materials for all the workshops/studios etc. of the college.

A provision of Rs. 17.51 lacs has been made in Annual Plan 1992-93.

(3) *Development of Library & Acquisition of specimen of Indian Arts—(Rs. 11.50 lacs)*

The Library of the college has been growing to become one of the finest of its kind in the country. Now it has to get ready for meeting the post graduate research requirements. The college has also made slides and film Library of selected works of Arts from all over the world.

The acquisition of selective works of traditional and contemporary Indian Art has been going on to become quite a significant collection for the air-conditioned college Art Gallery. This Scheme started in IVth Five Year Plan and has to continue. Provision has also been made for pedestals for sculpture, mounting, framing and restoration of Painting and Graphics. The gallery has also to be furnished and provided with suitable display boards and stands. The entire collections of the Art Gallery has to be listed, documented and published in comprehensive Catalogues as well as exhibited periodically. The following posts are proposed to be created under this scheme to help post-graduate students in Research work and for the Department of History of Art

		Rs.
1. Librarian (Senior)	1	2200-4000
2. Audio Visual Assistant	1	1640-2900

In addition to above posts, the post of Exhibition Officer in scale of Rs. 2200-4000 has since been created and the process of recruitment has been initiated.

The approved outlay for the Scheme for VIIIth Five Year Plan (1992-97) is Rs. 11.50 lacs. A provision of Rs. 2.12 lacs has been made in 1992-93.

(4) *Students & Faculty Development Programme—(Rs. 3.70 lacs)*

The following programmes are planned to initiate long over due development of students and faculty members of the college which is extremely important for improving the quality of teachers as well as taking them out of academic and professional isolation.

- (a) Visit of teachers to other important colleges in India and Abroad to learn specific techniques and methods in the field of their specializations.
- (b) Holding of important exhibitions and seminars on new innovations in the field of Visual Arts. Arranging illustrated lectures by eminent artists and professionals from India and abroad.
- (c) Publication of College magazines to include articles of Art Education, History, Criticism, Creative matters interaction with other arts.

The approved outlay for the scheme for VIIIth Five Year Plan (1992-97) is Rs. 3.70 lacs. A provision of Rs. 0.47 lac has been made in 1992-93.

(5) *Scheme for Academic Development of SC & ST students of the College (SCP)*
—(Rs. 0.80 lac)

Good Art materials and equipments are quite expensive but important to produce quality work. SC/ST Student from economically poor families are given necessary out material according to their needs. It is also proposed to organise special classes in theory subjects for weak students.

The approved outlay under the Scheme for 8th Five Year Plan (1992-97) is Rs. 0.80 lac. A provision of Rs. 0.15 lac has been made in 1992-93.

(6) *Introduction of New Courses of Studies—(Rs. 54.00 lacs).*

The College proposes to start three pending post-graduate courses during the VIIIth Five Year Plan with an intake of 7 for each in the following disciplines :—

1. Photography (Cinematography/Vedio)
2. Print Making Graphics
3. History of Art.

These Courses are already approved by the University of Delhi. In addition to above, there is great pressure on admission to B.F.A. Courses specially Applied Art. All graduates have been finding suitable jobs and there is need for more. The Courses Committee of the College has thought about it. It is, therefore, proposed to start a new course of Applied Design with an intake of 25 for B.F.A. Degree. Both courses of M.F.A. and B.F.A. have not been started so far for want of approval of competent authorities.

The infrastructure already built up in the College will support the above mentioned courses. However, as per the norms of the approved staffing pattern, the following new posts will be required.

For M.F.A. Courses

		Rs.
1. Professors	3	4500-7300
2. Assistant Profs.	3	3700-5700
3. Cameraman	1	1640-2900

For B.F.A. Courses

		Rs.
1. Professors	1	4500-7300
2. Asstt. Professors	3	3700-5700
3. Lecturers	6	2200-4000

Besides, the College also invites experts, professionals and Part-time teachers, to take special classes and give lectures as well as fill-up the gaps of leave vacancies and unfilled posts.

Stipends to all eligible post-graduate students will be paid as per the rates and conditions approved by the Ministry of Human Resources, Government of India, New Delhi.

The approved outlay under the Scheme for VIIIth Five Year Plan (1992-97) is Rs. 54.00 lacs. A provision of Rs. 4.75 lacs has been made in the Annual Plan 1992-93.

XVII—SPORTS AND YOUTH SERVICES

The schemes under this sector envisage promotion of sports and youth welfare programmes in Delhi. Facilities for promotion of sports and youth services are being provided by constructing sports complexes, stadia, swimming pools, development of play-grounds and youth hostels and arranging youth welfare programmes etc.

Seventh Plan 1985-90, Annual Plans 1990-91 and 1991-92

The agency-wise actual expenditure incurred during the 7th Plan 1985-90 and Annual Plans 1990-91 and 1991-92 is indicated below : (Rs. in lacs)

S. No.	Agency	Expenditure		
		7th Plan	1990-91	1991-92
1.	Dte. of Education	334.11	187.34	196.97
2.	M.C.D.	20.97	25.00	30.00
3.	N.D.M.C.	129.40	12.00	7.50
4.	N.C.C. Deptt.	81.67	8.15	16.44
Total :		566.15	232.49	250.91

During 1990-91, 186 posts were created under the scheme "Delhi Council of Sports & Promotion of Sports". A sports complex in Trans.yamuna Area is being constructed by the DDA on behalf of the Dte. of Education. The total cost of project Rs. is 5 crores. The work is in progress.

From the Annual Plan, 1990-91 onwards six schemes of NCC Deptt. earlier shown under General Education Sector were transferred to Sports and Youth Welfare Sector as per the recommendations of the Working Group of the Planning Commission for the Annual Plan 1989-90.

8th Plan 1992-97 & Annual Plan 1992-93

For the 8th Five Year Plan 1992-97 a sum of Rs. 1400.00 lacs is approved which includes Rs. 290.00 lacs for 1992-93. The agency-wise outlays are indicated below :—

(Rs. in lacs)

S. No.	Agency	Approved Outlay	
		8th Plan 1992-97	Annual Plan 1992-93
1.	Dte. of Edn	950.00	200.00
2.	M.C.D.	150.00	30.00
3.	N.D.M.C.	50.00	10.00
4.	N.C.C. Deptt.	250.00	50.00
Total :		1400.00	290.00

The agency-wise/scheme-wise details are as follows.

I. DIRECTORATE OF EDUCATION, DELHI

1. *Delhi Council of Sports & Promotion of Sports—(Rs. 450.00 lacs)*

The scheme aims at promotion and popularisation of sports & games in Delhi by providing opportunities and facilities to the young & talented players to learn, train & improve their standard in Sports & Games.

Physical education is important for the all-round development and improvement of the health and mental faculties of individuals. Sports & Games help in producing healthy, mentally alert and confident citizens.

Details of the activities/programmes/tournaments proposed to be conducted in the 8th Five Year Plan 1992-97 and 1992-93 are as follows :—

- (1) Rural Sports Competitions.
- (2) Women Sports Festival.
- (3) Establish 'Day Sports Schools & Sports Institutes'.
- (4) Localised Special Coaching Programmes for the outstanding student players by appointing experienced and outstanding players with the help of Sports Associations.
- (5) Refresher's Course for the inservice of P.E.T's. to equip them with the latest knowledge including attending seminars and special training courses.
- (6) Organise invitational tournaments including inter national tournamens.
- (7) Organise Distt./Inter Distt. tournaments.
- (8) Organise National School Games in Delhi.
- (9) Participate and organise various national level tournaments such as Mini & National School Games. All India Rural Sports, All India Women's Sports Festival etc.
- (10) Organise sports competitions in every metropolitan constituency in Cross-Country Races, one major and one minor game.
- (11) Organise sports competitions at micro level of the school students of Education Deptt.
- (12) Conduct Regular coaching camps round the year and selection of team for National & International Tournaments.
- (13) Purchase sports materials for coaching camps centres and schools.
- (14) To provide playing kits and other essential equipments to the players
- (15) Reception and award to the outstanding players who won I, II and III position in the National & International Tournamerts.
- (16) To organise/conduct sports tournaments for Delhi Admn. employees and provide financial assistance to Delhi Admn's. teams for participation in various All India Civil Service Tournaments.
- (17) Incentives to PETS & Coaches.
- (18) Incentives to the school winning first positions in the Inter-Distt. Tournamerts.

- (19) G.I.A./Financial Assistance for purchase of sports materials for SC/ST & economically backward students @ 25/- per head per year and Rs. 10/- per head per year for other students.
- (20) To purchase Jeep/Matador Vehicles for Sports Branch.
- (21) To bring out a magazine.
- (22) Staff for various schemes.
- (23) Other misc. & unforeseen and emergent events such as stationery, medicines, medical-aid, petrol/diesel, maintenance of vehicles & typewriters, telephones, cyclostyling machines, Electronic Bilingual Typewriter etc.
- (24) Coaching with the help of Physical Education Teachers.

To impart effective physical fitness training and specialised sports coaching to players who are selected for the Inter State, Mini & National School Games, All India Rural Sports Tournaments/International Meets, it was decided that in each school every Physical Education Teacher must impart coaching to the selected players in the game in which specialisation was done after or before school hours for 2 hours. For this a remuneration of Rs. 300/- P. M. may be given, for six months from 1st August to 31st January and Rs. 50/- per day per head during summer vacation for 3 hours a day. Under this scheme the following facilities will be provided :—

- (i) Sports material
- (ii) One Attendant
- (iii) Miscellaneous expenditure for the maintenance of play grounds.

The following 186 posts were sanctioned in the Sports branch during 1990-91. Some posts were filled up and action is being taken to fill up the remaining posts :

S. No.	Name of Posts	No. of Posts	Pay Scale
1.	Addl. Director of Education (Sports & Youth Welfare)	1	3700-5000
2.	Dy Director (Admn.) DANICS	1	3000-4500 plus Rs. 200/- PM as special pay.
3.	Sr. Sports Teachers	8	2000-3500
4.	Sports Teachers	36	1640-2900
5.	Jr. Sports Teachers	58	1400-2600
6.	Superintendent	1	1640-2900
7.	Head Clerk	2	1400-2300
8.	Jr. Accounts Officer	1	1640-2900
9.	U.D.C.-cum-Store Keeper	12	1200-2040
10.	L.D.C.	15	950-1500
11.	Stenographer	1	1200-2040

12. Stenographer Sr.	1	1400-2300
13. Gestator Operator	1	950-1500
14. Despatch Rider	1	950-1500
15. Chowkidar	5	750-940
16. Peon-cum-Messenger	8	750-940
17. Mali-cum-Groundman	23	750-940
18. Sweeper-cum-frash	11	
	186	

The following additional staff are also required for strengthening the sports programme at grass root level i.e. at each Sports Distt. level :—

1. Principal (Sports & Games) (One for each District)	5	3000-4500
2. Sr. Sports Teacher	15	2000-3500
3. Sports Teacher	14	1640-2900
4. Jr. Sports Teacher	42	1400-2600
5. Mali-cum-Groundman	27	750-940
6. U.D.C.	5	1200-2040
7. L.D.C.-cum-Store Keeper	10	950-1500
8. Peon	5	750-940

These staff will organise and supervise regular Sports & Youth Programmes in different Districts, Zones & Sports Complexes.

It is proposed to start a Special Nutrition Programme for the selected, talented and promising student players. The potential players/competitors may be allowed supplementary nutrition at the playground/coaching centres. In 738 urban schools and 160 rural schools, the approximate number of students are 4.48 lacs and 1.48 lacs respectively. Despite these, the desirable level of sports has not been attained basically due to under-nourishment and other factors. It is felt that by providing supplementary diet the Deptt. will be able to impart strenuous training to the young and promising student players to bring them to a level from where they can compete in international competitions. The number of sports disciplines presently being taken up by the Sports Branch are, Athletics, Handball, Football, Kabaddi, Kho Kho, Gymnastic, Lawn Tennis, Table Tennis, Wrestling, Cricket, Volley-ball, Weight Lifting, Basket Ball, Badminton, Hockey & Swimming.

To begin with, 200 players will be identified in each of 16 disciplines at various centres and will be provided supplementary nutrition @ Rs. 7/- per head per day for 240 days in the Annual Plan 1992-93.

Medical facilities are also proposed to be provided to the players by regular checks/examination at each centre. At the initial stage this scheme may be covered under the regular Medical Health Scheme of schools. In due course this scheme may be converted to a full fledged scheme.

Sports School

For the promotion of sports 'A Day SPORTS SCHOOL' was opened by the Sports Branch. But due to non-availability of staff 'The School' had to be closed. The following facilities are to be provided to the students to restart the School :—

1. Latest technical guidance and coaching on scientific lines for the selected players in selected disciplines.
2. Daily sumptuous refreshment & lunch to every student.
3. Playing kit, sports material, sports equipments & training aids.
4. Free books, stationery and medical aid to every student.
5. The following staff are required :—
 - (i) Principal or Vice-Principal (with sports background).
 - (ii) Sports Officer.
 - (iii) Sports Experts/Coaches/Subject teachers.
 - (iv) Administrative Officer.
 - (v) Accounts Officer
 - (vi) Office Staff
 - (vii) Groundsman, Sweeper etc.

Formation of Delhi Sports Authority :

Delhi Council of Sports is a registered body but is not working as an independent body. Sports & games are being looked after by the Sports Branch of the Dte. of Education. It is proposed that the Delhi Council of Sports be renamed Delhi Sports Authority which should be an autonomous body and should work under the Directorate of Education. All the schemes for promotion of Sports & Youth Programme shall be a part of the Sports Authority of Delhi. No extra fund is required for this proposal.

To implement this scheme Rs. 450.00 lacs (Revenue) are provided for 8th Five Year Plan 1992-97. The Annual Plan 1992-93 outlay approved for the Scheme is Rs. 40 lacs.

2. *Development of Playgrounds, Sports Complexes, Swimming Pool, Gymnasium Halls etc. (Rs. 200 lacs)*

The scheme aims at development of under developed playgrounds, construction of sports complexes, swimming pools, gymnasium Halls for providing effective & adequate facilities to the Young talented School players of Delhi to achieve the main objective of popularising and promoting sports & games.

It is proposed to construct one Sports Complex, Gymnasium Hall & Swimming Pool in each of 28 education zones. More facilities like change rooms & toilets, office blocks, at the existing Sports Complexes/Coaching Centres are proposed to be provided.

It is proposed to lay a synthetic running track and synthetic tennis courts at the Chhattarsal Stadium in 1992-93 to provide the latest facilities to our players. Canteen and Squash Courts at Chhattarsal Stadium are to be constructed.

The Sports Branch of the Education Department has two Stadia i.e. Chhattasal & Thyagraj Nagar at Present. Work at Srinivas puri is in progress which is likely to be completed by the end of 1992.

To check unwanted elements from entering these stadia and also for proper security of both men and costly sports material, it is proposed to employ security guards at each of the open gates of these stadium. They will be employed in 2 shifts each of 8 hours. As such a total of 20 security guards will be required on the anabgy of Sports Authority of India.

Funds are required for maintenance of the playgrounds where coaching centres are run and for Sports Complexes, Gymnasium Halls, Swimming Pools & Chhattasal Stadium, to supply the basic, amenities like lime powder, earth roller etc.

A sum of Rs. 200 lacs for 8th Plan 1992-97 (Rs. 75 lacs Revenue & Rs. 25 lacs Cap.) is approved for the scheme. The outlay approved for the scheme during the Annual Plan 1992-93 is Rs. 40 lacs (Rs. 10 lacs under revenue & Rs. 30 lacs under capital).

3. Youth Welfare Programmes (Rs. 75.00 lacs)

This continuing scheme envisages inculcation of the spirit of adventure, self-confidence and self-dependence amongst the Youth of Delhi particularly school students and give them opportunities to interact and understand each others culture.

To achieve this objective, following programmes are conducted :—

1. Trekking, Rock-climbing and Mountaineering programmes.
2. Organisation of camps through Scouts and Guides.
3. To hold Seminars/Youth Festivals for Youths.
4. Tours within India & Outside India.
5. To purchase furniture and jeep for Youth Hostels.
6. Winter & Water games.

It is proposed to organise camps for scouts and guides and sports of various categories to inculcate the spirit of self confidence, self dependence and inter-act with students of other parts of the country.

The Lt. Governor has emphasised the need of conducting trekking, rock climbing and mountaineering programmes regularly for the school students. There is tremendous response for these programmes from school students and so more programmes will be organised in the Annual Plan 1992-93.

It is also proposed to construct Youth Hostels at Tughlakabad, Thyagraj Nagar and Srinivaspuri for which an initial amount of Rs. 40 lacs under capital head is needed in 1992-93. The following posts are required for this purpose.

1. Sr. Sports Teacher	1
2. Sports Teacher	4
3. Jr. Sports Teacher	8
4. U.D.C.	6

5. L.D.C.	9
6. Storekeeper	3
7. J.A.O.	2
8. Mali	4
9. Peon	10
10. Kitchen Staff	4
11. Driver	1
12. Chowkidar	8

An outlay of Rs. 75 lacs is approved for the 8th Five Yera Plan 1992-97 (Rs. 30 lacs under Revenue & Rs. 45 lacs under Capital Head). For the Annual Plan 1992-93 the approved outlay for the scheme is Rs. 25 lacs (Rs. 5 lacs under Revenue & Rs. 20 lacs under Capital).

4. Rural Sports Stadia (Rs. 75 lacs)

It is proposed to construct a Wrestling Institute at Prahlad Pur to provide training and coaching to the young students in wrestling. The then L.G./C.E.C. had already laid the foundation stone of the wrestling Institute.

It is proposed to construct Sports Stadia/Complexes in the other rural blocks of Delhi. One has already been constructed at Najafgarh. The posts needed for these wrestling Institute and Sports Complexes will be created according to the norms.

Rural areas do not have adequate sports facilities. Delhi has 5 rural Blocks. In each Block particularly Mehrauli, Najagarh, Nangloi and Alipur the number of the villages is more than 100. Each village has population of more than 2000.

There is a scheme to promote sports in villages in collaboration with S.A.I. But the number of participants is negligible in the absence of proper staff and organisers.

Most of the national players are from rural areas. But in Delhi it has been completely neglected. The following facilities are proposed to be provided in rural areas immediately :—

- (i) Special Coaching.
- (ii) Development of Playgrounds in each school of rural area.
- (iii) Sports Material.
- (iv) Regular Competitions in Rural Area.
- (v) Development of one coaching centre in each of rural area and one centre in each village.

For each village at least one Junior Sports Teacher may be appointed to develop one game for the young players. The strength of villages in Delhi is approximately 200. Initially 20 Junior Sport Teachers (Rs. 1400-2600) and 20 Groundman-cum-Mali (Rs. 750-940) may be appointed to implement the scheme.

In case of problems in appointing permanent staff, it is proposed to engage staff on part-time basis. The salary of the part-time Coaches will be paid @ Rs50/- per day for 2½ hours and for casual Labour as per existing rules.

Wrestling Institute :

The following staff is required as soon as the institute comes into existence at Prahladpur :—

1. Principal	1	
2. Superintendent	1	
3. Head Clerk	1	
4. UDC-cum-Storekeeper	3	
5. L.D.C.	3	
6. Steno	2	(One Eng. & One Hnd)
7. Jr. Account Officer	1	
8. Sr. Sports Teacher	2	
9. Sports Teacher	6	
10. Jr. Sports Teacher	12	
11. Messenger	2	
12. Peon	4	
13. Groundman-cum-Mali	30	
14. Sweeper-cum-Farash	5	
15. Chowkidar	4	
16. Gestetner Operator	1	
17. Librarian	1	
18. Library Attendant	1	
19. Electrician-cum-Mechanic	1	
20. Receptionist	1	
21. Driver	5	
22. Doctor	1	
23. Nurse	2	

A sum of Rs. 75.00 lacs (Rs. 15 lacs under Revenue and Rs. 60.00 lacs under Capital) is approved for 8th Five Year Plan 1992-97 to implement the scheme. The Annual Plan 1992-93 provision is Rs. 25 lacs.

5. Construction of Sports Complex in Trans-Yamuna Area (Rs. 75 lacs)

It was decided to construct a sport complex in Trans-Yamuna Area as there is no other such complex. It was agreed that DDA will provide land free of cost and the construction cost will be borne by Education Deptt. For this purpose a piece of land measuring 27.58 hectares at Suraj Mal Vihar in Trans-Yamuna Area has been made available by DDA. The construction work has been assigned to DDA. The Complex is proposed to be constructed as an Open Air Stadium. The stadium will accommodate 30,000 spectators.

A sum of Rs. 100 lacs during 1989-90, Rs. 87.70 lacs in 1990-91 and Rs. 65 lacs during 1991-92 had been paid to DDA for this Complex. The work of boundary wall and earth filling is in progress. For the entire project Rs. 75 lacs for 8th Plan 1992-97 is approved. The Annual Plan 1992-93 provision is Rs. 55 lacs.

6. Development of Physical Education (Rs. 75 lacs)

(Objectives/Programmes)

1. Promotion of Physical Education as a compulsory subject upto Secondary level.
2. Introduction of Physical Education as a compulsory fitness programme for all at the Senior Secondary level.
3. Introduction and promotion of Physical Education as an elective subject at the Sr. Sec. level.
4. Integration of learning processes and evaluation of students performance with academic ones.
5. Promotion of 'Bhartiyam' Programme.
6. Development of Sports and Physical Culture.
7. Promotion of social equalisation and patriotism.
8. Promotion of Health Education and Health Services.
9. Development of leadership qualities.
10. Promotion of Yoga Instruction and indigenous system of exercises in India.
11. Inservice Teachers orientation Programme.
12. Pre-service teacher orientation programme.
13. Intensive training programme of inservice teachers for growth of professional skill and competence.
14. Development of instructional material and teaching aids.
15. Development of teacher hand books.
16. Development of zonal and Distt. teams.
17. Promotion of sports through incentive prize money scheme.
18. Development of infrastructure in schools, zones & Districts.
19. Purchase of sports material for distt., training centres, school and Head quarter.

These programmes are proposed to be implemented during the Annual Plan 1992-93 and the 8th Plan 1992-97.

It is proposed to strengthen the administrative machinery of the scheme for qualitative improvement in the programmes. The following posts will be created during the 8th Five Year Plan period.

Sl. No.	Posts	No. of Posts	Pay Scale
1.	Addl. D.E. (P.E.)	1	3750-5000
2.	JDE (Physical Edu.)	1	3750-5000+S. P.
3.	DDE	2	3750-4500
4.	ADE	7	3000-4500
5.	Dy. Education Officer	7	3000-4500
6.	Supervisor	33	2000-3500
7.	Supdt.	1	1640-2900
8.	Head Clerk	5	1400-2300
9.	U.D.C.	10	1200-2040
10.	L.D.C.	20	950-1500
11.	Steno (PA)	10	1200-2040
12.	Class-IV	20	750-940
13.	Driver	1	950-1500
14.	Store Keeper	1	1200-2040
15.	Librarian	1	1400-2600
16.	Gestetner Operator	1	850-1500
		121	

The annual salary expenditure would be about Rs. 20 lacs.

(i) The Addl. D.E. (PE) is to co-ordinate the activities of the head office, districts and other agencies and to give directions to the programmes and implementation of policies and to assist the Director of Education.

(ii) Jt. Director of Education (PE)—is to supervise, control and co-ordinate the activities and programme with different state agencies of sports and voluntary organisations, Sports Authority of India and various Ministries in Government of India.

(iii) D.D.Es at head quarter are to co-ordinate the activities of the district as well as execute the programmes at the state level. Research, Training and Development Programme of all the branches will be looked after by D.D.E. (Research Training & Development).

(iv) *ADEs and DEOs at Head Quarter*

The activities of the schools will be carried out separately for boys and girls. The programme will require two sets of supervisory officers. They will also associate themselves with the selected team for participation in outside activities like Integration and National Games, Trekking Hiking and camping programme etc. As regards Research, Training and Development section, the ADE and DEO shall work in a combined manner to tailor out the training programme according to the demands of the time. They will also be responsible for development of professional growth and competence.

The Research Training and Development section shall also be responsible for dissemination of the latest information, modification of rules and regulations and new techniques in the field of pedagogy. The cell shall also be responsible for preparation of vide records for execution and teaching purposes. This section shall also keep computerised data of the progress of district and state teams and the students and the teachers proficiency in different areas to make the information available to the concerned branches.

(v) *Supervisors/School Inspector at Head Quarter*

Supervisors/School Inspector will be the base level officers to provide assistance to the ADE & DEO in organising activities at Inter-District/State level and also provide assistance in the selection of state teams. He will also guide the dealing assistants to prepare necessary drafts/notes for submission because the entire work will be of technical nature.

(vi) *ADEs and DEOs Distt. level*

Every cell of the district level is proposed to be provided with the services of one ADE and one DEO. The posts carry equal pay scales at present. But they will look after the work of the boys and girls sections separately and the ADE shall enforce the directions received by the DDE district. The officers shall assist the H.Q. in carrying out special inspections of the school for assessment of their need and the state of activities. These posts will be created in phases.

Provision for Misc. expenditure like maintenance of Jeep, Telephone and purchase of Typewriter etc. is included in the scheme.

It is proposed to purchase one Jeep and 5 Mini Buses during the 8th Plan to cover and contact the vast expanding sphere of sports and physical education and allied activities.

In-service Teacher Training

Owing to expanding activities and explosion of knowledge in sports and physical education, it has become imperative that a constant ongoing programme of re-orientation of teachers, training of leaders, and revaluation of curriculum may be proposed. It is therefore, envisaged that one training centre may be developed in each district.

To implement the programmes, an amount of Rs. 75 lacs is approved for 8th Plan 1992-97. The outlay approved for the Annual Plan 1992-93 is Rs. 15 lacs.

II—Municipal Corporation of Delhi

1. Improvement of Physical Education—(Rs. 50 lacs)

Objectives :—To run physical education centres for adults, to guide and run physical education programmes, to organise Inter-school competitions, to conduct open competitions, to purchase sports material and band equipment, to provide in-service training to teachers, coaching camps for children and cash awards to children etc. for improving the physique and health of children.

There is a separate wing for physical education in the Education Department of the Corporation to guide and run physical education programmes in schools and organise inter-school and inter-zonal competitions in various games and sports and open competitions for outsiders.

Provision for purchase of sports material for schools and physical education centres, band equipment for primary schools including band uniforms and coaching/training and scholarships in sports and games, work projects for better and effective Physical and Health Education for the children is included, in the 8th Plan. In-service Training Programmes in Physical Education, Health Education and Ppuation Education will be arranged. The following posts are proposed to be created during 8th Plan as well as 1992-93.

Physical Targets		1992-97	1992-93
(a)	Health Educator 2)	7	7
	Teacher Educator 1)		
	Artist 1)		
	Stadium Incharge 3) (Rs. 1640-2900)		
(b)	School Inspector (2000-3500)	1	1
(c)	Steno-typist (1200-2040)	1	1
(d)	L.D.C. (950-1500)	2	2
(e)	Peon (750-940)	1	1

An amount of Rs. 50 lacs is approved for 8th Plan which includes Rs. 0 lacs for 1992-93 to implement the Scheme.

2. Sports Complex-cum-Mini Stadia—(Rs. 100 lacs)

In order to maintain the physical fitness of the children and to increase the sport activity among the school students it is proposed to provide one sports complex-cum-mini stadium in each of the ten zones of M.C.D. Some swimming pools are also proposed to be set up. Suitable location will be found in consultation with D.D.A. These zonal sports complexes will also include physical centres which will help in organising sports competition at zonal level.

Work of Punjabi Bagh Football Stadium have spilled over to 92-93. During 92-93 it is proposed to take up const. of mini stadium at R. K. Puram Sector III, Vaishali and swimming pool at Lawrance Road Keshav Puram, Municipal Sports Club.

Other proposals for 8th Plan are mini stadium at Naraina, Alipur Mpl. Sports Club, Yamuna Vihar and Suraj Mal Vihar. It is also proposed to develop 00 play grounds during the 8th Plan period including 10 during 1992-93.

To implement the scheme an outlay of Rs. 100 lacs is approved for the 8th five Year Plan including Rs. 20 lacs for 1992-93.

III—New Delhi Municipal Committee

1. Expansion of Physical Education—(Rs. 49 lacs)

NDMC has been providing sports material to its Schools and Coaching Centres. Due to the increasing strength of students more equipment/sports material are required for Schools & Coaching Centres. Other programmes are :

(a) Creation of posts for Zones & Sports Coaching Centres

NDMC schools are divided into 4 zones. For better inspection/supervision in the schools & sports coaching centres it is proposed to upgrade the two existing posts of Supervisors (PE) in the pay scale of Rs. 1640-2900. Two more posts of Supervisor/Inspectors (PE) are required so that all the four zones will be inspected properly. 4 Jr. Clerks & 4 Peons are required in order to stream-line office work.

(b) Athletic Coaches for Athletic Coaching Centre

For proper coaching in the Athletics to girls and boys it is proposed to appoint 2 Athletic Coaches (One Male & One Female) alongwith 2 Peons-cum-Ground Marker.

(c) Staff for Swimming Pools

Five Swimming Pools are being run by NDMC. One more Swimming Pool is under construction at Netaji Nagar. At present regular staff are provided only for 4 Swimming Pools. It is proposed to create 2 more posts of Swimming Coaches-cum-Life Guards, 2 Pump Operators, 4 Chowkidars and 2 Sweepers, for two Swimming Pools at Laxmi Bai Nagar & Netaji Nagar.

(d) Yoga Experts

Presently Yoga activities are running in NDMC Schools. It is proposed to open 2 more Yoga Centres in the NDMC area. 2 Yoga Experts and 2 Peons-cum-Ground Markers will be appointed during 1992-93 which will continue for the 8th Plam period.

The following posts are proposed to be created under the scheme during 8th Plam period :—

S. No.	Designation of Posts	No. of posts	Pay Scale (in Rs.)
1.	Supervisor/Inspector (PE)	2	1640-2900
2.	Jr. Clerk	4	1200-2190
3.	Peon-cum-Ground Marker	4	950-1560
4.	Sports Coach (Athletic)	2	1640-2900
5.	Peon	4	950-1560
6.	Swimming Coach-cum-Life Guard	2	1400-2600
7.	Pump Operator	2	950-1500
8.	Chowkidar	4	950-1560
9.	Sweeper	2	950-1560
10.	Yoga Experts (1 male & 1 female)	2	1640-2900

(e) Students who secure high positions in Games/Sports in Zonal, State and other competitions will get Scholarship @ Rs. 20/-, Rs. 30/- and Rs. 50/- per month at the Primary, Middle & Secondary/Sr. Secondary level respectively. It is proposed to revise the amount of Scholarship to Rs. 30/-, 40/- & Rs. 60/- per month in the Primary, Middle and Secondary/Sr. Secondary level respectively.

(f) *Capital Work*

Under the Capital Works 1 Yoga Centre (Hall), 1 Judo Hall, 1 Gymnastic Hall, 1 Athletic Coaching Centre will be constructed.

To implement the programmes the approved outlay for 8th Plan is Rs. 49.00 lacs out of which Rs. 9 lacs is approved for 1992-93.

2. *Development of Play Grounds (Rs. 1 lac)*

Play grounds in NDMC Schools need to be developed. The approved outlay for the scheme in the Annual Plans 1992-93 is Rs. 1 lac and the same amount is approved for the 8th Plan also.

IV. N. C. C. Department

National Cadet Corps (NCC) is the premier youth organisation of the country. It aims at developing leadership, character, sportsmanship and ideals of service. It also aims at creating a force of disciplined and trained manpower which could be of assistance to the country in Emergencies. Keeping in view the aims of NCC and their impact at the national level it is considered desirable that the maximum number of young people are induced to join this organisation.

An outlay of Rs. 250 lacs is approved to implement the ongoing par schemes of NCC Deptt. during the 8th Plan period

The details are as under :—

1. *Construction of NCC Bhawan—(Rs. 175.00 lacs)*

The scheme provides for construction of NCC group Headquarter and NCC units. The total requirement of land is 17 acres for both the group Headquarters and 18 NCC units. DDA allotted land measuring 6.79 acres at Rohini Complex. Cost of land amounting to Rs. 54.32 lacs was paid. The construction of the boundary wall was completed during 1991-92.

During the 8th Plan period it is proposed to complete building accommodation for Group 'B' and 9 allied units and to purchase 10.21 acres of land from DDA for Group 'C' in South Delhi near Safdarjung Air Port.

Against the approved outlay of Rs. 25.00 lacs during 1991-92 an amount of Rs. 7.44 lacs has been spent on completion of boundary wall. The construction of NCC Bhawan is likely to start during 1992-93. An outlay of Rs. 175.00 lacs for 8th Plan and Rs. 35.00 lacs for 1992-93 is approved.

2. *Construction of Boat Houses and Jetties—(Rs. 10.00 lacs)*

No expenditure could be incurred on this scheme during 7th Plan and Annual Plans 1990-91 and 1991-92 due to non-availability of land. The matter has already been taken up with DDA for allotment of land on the bank of the Yamuna near Bala Road and Okhla. Rs. 10.00 lacs is approved for the 8th Plan 1992-97 out of which Rs. 2 lacs is for 1992-93.

31. *Free transportation to NCC girl cadets/lady officers—(Rs. 15.00 lacs)*

One Mini Bus costing Rs. 0.80 lac purchased in 1983-84 another during 1991-92 are on the road. For 8th Plan 1992-97 Rs. 15 lacs is approved out of which Rs. 13.00 lacs is for 1992-93 for purchase of 5 Mini Buses during 8th Plan and one Mini Bus in 1992-93.

41. *Augmentation of Training Facilities—(Rs. 15.00 lacs)*

Rs. 1.50 lacs were spent in organising training camps, participation in national events; etc. during 1991-92. During 8th Plan further training facilities, training camps national events programmes like adventurous activities, specialised training activities like Archery practice, Rifle shooting practice, gliding, swimming etc. are proposed to be undertaken for which Rs. 15.00 lacs is approved including Rs. 3.00 lacs for the Annual Plan 1992-93.

55. *Strengthening of NCC Headquarter—(Rs. 15.00 lacs)*

During 8th Plan it is proposed to strengthen NCC Headquarter by creating suitable posts. During 1991-92 the expenditure incurred was Rs. 2.00 lacs. For 1992-93 an outlay of Rs. 3.00 lacs is approved and Rs. 15.00 lacs is approved for the 8th Plan.

65. *Incentives to NCC Cadets—(Rs. 10.00 lacs)*

Various incentives like scholarships, awards, prizes etc. are proposed to be given to motivate the students to join NCC. To continue the scheme an outlay of Rs. 10.00 lacs is approved for 8th Plan including Rs. 2.00 lacs for 1992-93.

77. *Providing sports facilities to NCC Cadets—(Rs. 10.00 lacs)*

Under this scheme the Dte. of NCC is providing sports facilities exclusively to NCC cadets. Sports materials are supplied to them and some arrangement for games like Hockey, Football, Badminton etc. are made. Inter Unit/Group sports meets are organised and outstanding teams/units are given awards, prizes, cups and trophies etc. Rs. 1.00 lac was spent during 1991-92. For 8th Plan an outlay of Rs. 10 lacs is approved including Rs. 2 lacs for 1992-93.

IX. 3. ARTS AND CULTURE

The Schemes of Delhi Archives, Department of Archaeology, Sahitya Kala Parishad, Delhi Gazetteer, Language Department and four academies, viz., Hindi Urdu, Punjabi and Sanskrit are included under this Sector.

The Archives Department is concerned with the collection of old records of the Offices and Departments in the Administration, acquisition of documents, manuscripts, paintings and rare books etc., depicting the history of Delhi for proper preservation, maintenance and upkeep for administrative reference and historical research.

The ancient monuments which do not come within the purview of Archaeological Survey of India are, being maintained by the Archaeology Department.

The Sahitya Kala Parishad promotes Indian Culture and co-ordinates literary activities in Indian Languages.

The Language Department was established in 1961 to ensure progressive use of Hindi in the official work of the Administration and to provide necessary safe-guards to other two recognised minority languages, viz., Punjabi and Urdu.

The four academies, viz., Hindi, Punjabi, Urdu and Sanskrit are implementing various programmes for the development of respective languages, literature and culture and also to project the composite linguistic culture of Delhi.

In addition, one scheme 'Library facilities in the areas of weaker sections was also approved under the Annual Plan 1989-90.

7th Five Year Plan 1985-90 and Annual Plans 1990-91 and 1991-92

The following table indicates the actual exp. incurred in 7th Plan and Annual Plans 1990-91 and 1991-92.

(Rs. in lacs)

S. No.	Agency/Scheme	Actual Expr.		
		7th Plan 1985-90	1990-91	1991-92
1	2	3	4	5
1.	Delhi Archives	88.42	2.42	1.74
2.	Deptt. of Archaeology	28.63	4.32	9.89
3.	Sahitya Kala Parishad	272.39	57.00	60.00
4.	Delhi City Museum	99.87	—	—
5.	Delhi Gazetteer	6.40	0.01	0.01
6.	Language Department	15.60	0.23	1.92
7.	Hindi Academy	214.85	45.00	44.00
8.	Punjabi Academy	410.93	50.00	72.40

1902			
9. Urdu Academy	216.27	50.27	43.00
10. Sanskrit Academy	23.00	12.00	20.00
11. Regional/Zonal Cultural Centres	100.00	—	—
12. Library facilities in the areas of weaker sections	—	—	—
13. Conservation of Urban Heritage (DDA)	—	20.00	—
Total	1476.36	241.25	252.96

8th Five Year Plan 1992-97 and Annual Plan 1992-93

An amount of Rs. 1200 lacs has been approved for 8th Plan under the Sector which includes Rs. 250 lacs for Annual Plan 1992-93. The Agency-wise approved outlay for 8th Plan 1992-97 and Annual Plan 1992-93 is indicated below :—

(Rs. in lacs)			
Approved outlay			
S. No	Name of Agency	8th Plan 1992-97	Annual Plan 1992-93
1.	Delhi Archives Deptt.	50.00	8.00
2.	Deptt. of Archaeology	39.00	5.00
3.	S.K.P.	250.00	50.00
4.	Delhi Gazetteer	10.00	2.00
5.	Language Deptt.	15.00	3.00
6.	Hindi Academy	205.00	45.00
7.	Punjabi Academy	260.00	50.00
8.	Urdu Academy	205.00	48.00
9.	Sanskrit Academy	75.00	15.00
10.	Delhi City Museum	75.00	21.00
11.	Library facilities in the area of weaker section	15.00	2.00
12.	Conservation of Urban Heritage	1.00	1.00
Total :		1200.00	250.00

The "Punjabi Language Teaching Programme" and "Urdu Language Teaching Programme" have been transferred to "Arts & Culture" Sector from 1992-93 onwards and provision for these programmes has been made.

The Agency/Scheme-wise details are as follows :—

1. Delhi Archives—(Rs. 50 lacs)

The Scheme of Delhi Archives relates to survey, acquisition, documentation and preservation of Delhi's cultural heritage in the shape of documents, manuscripts, rare books, maps and other records containing information of administrative use and

historical value, available both in public and private custody. The scheme mainly provides for centralisation, preservation, maintenance and servicing of all the 25 year old records of permanent nature belonging to the Offices/Departments of Delhi Administration.

Out of the approved outlay of Rs. 50 lacs, the department proposes to allocate Rs. 10 lacs for Capital Works and Rs. 40 lacs on Revenue Account under the Scheme for the 8th Five Year Plan 1992-97. For the Annual Plan 1992-93, an outlay of Rs. 8 lacs comprising Rs. 2 lacs on Capital Works and Rs. 6 lacs on Revenue Account has been approved.

The main achievements and future plans of programmes under the Scheme are reflected as under :—

I. Capital Works

(i) *Building for Delhi Archives*:— Construction of a separate functional building for Delhi Archives has already been completed. However, the work relating to provision of ancillaries and setting up of various functional units is still in progress. The Stack Block is centrally air-conditioned to keep the records in optimum condition.

During the 8th Five Year Plan 1992-97, it is proposed to set-up a permanent Exhibition Hall and a sound proof room for recording of memories of eminent persons under the Oral History Programme etc. besides, taking up preliminary works regarding construction of another Stack Block under Phase-III of the building plan. Sanction amounting to Rs. 2.87 lacs has been issued for work on the Exhibition Hall. This is likely to be taken up and completed during 1992-93. Rough drawings/design for the sound proof recording room are being finalised and the same would be sent to the PWD for preparation of estimates and execution of the job during Annual Plan 1993-94. There is a deep slope at the back of the building plot which requires earth filling for taking up the proposed construction work under Phase-III. Raising of boundary wall on that site from security point of view is needed. These works are proposed to be executed during the 8th Plan period.

II. Revenue Account

(i) *Archival Policy Resolution*:—Delhi Administration, adopted a Policy Resolution in respect of the records of Delhi vide Notification No. F. 1 (26)/1973- Archives dated 4-9-1975 and published in Delhi Gazette. The Resolution, defines and regulates the responsibilities of the Departments/Offices of Delhi Administration for proper custody, care and management of their records, selection and retention of records of permanent value to Delhi Archives; and lays down the responsibilities of Delhi Archives in respect of public records in its custody and also those with the various Departments/Offices of Delhi Administration and also prescribes the limits and conditions governing public access to the records. In pursuance of the Resolution, the Department is trying to regulate its activities to fulfil all its responsibilities. However, for want of separate professional staff, the Resolution could not be implemented fully in letter & spirit. Hence, posts of Senior Archivist, Archivist and Assistant Archivist Gr. I are proposed to be created in the Annual Plan 1992-93 to ensure effective implementation of the Resolution.

(ii) *Record Management* :—Proper housing and upkeep of records at every stage of their life span from the time of their coming into being till their final disposal/transfer to the concerned Departmental Record Rooms or subsequent retention in a Central Archival Repository is an important and integral aspect of effective Record Management. Archives owns responsibility for the care of records preserved in the Archives as well as those preserved in different Govt. agencies even in their current, semi-current and non-current stages, as, in the long run, records worth permanent retention are transferred to the Archives. Accordingly, a programme to carry out regular periodical inspections of the Departmental Record Rooms of the Departments/Offices of Delhi Administration for providing them on the spot guidance and assistance in proper and effective Record-Management has been proposed. Posts of Field Officer and Assistant Archivist Gr. I are proposed to be created during Annual Plan 1992-93. An Archivist is also required exclusively for co-ordination of this programme.

(iii) *Record Retention Schedules* :—Public records of common nature are governed by the Record Retention Schedule prescribed by the Government of India, Department of Personnel and Administrative Reforms. There are a large number of records of different types and uncommon nature belonging to various Offices/Departments of Delhi Administration which do not come under the purview of the said Record Retention Schedule. It is, therefore, proposed to finalise Record Retention Schedules for all such records of uncommon nature and undertake periodical review thereof so as to facilitate appraisal of records due for transfer to Archives.

(iv) *Appraisal and acquisition of public records* :—The Department accepts all 25 years old records of permanent value from Offices/Departments of Delhi Administration after appraising their administrative reference and historical research value. There is a back-log of records due for transfer to Archives. Hence, the Department proposes to appraise and acquire all such records. Survey and listing of documents of Delhi's interest for obtaining microfilm copies thereof is also proposed to be carried out at Haryana, Himachal Pradesh, Rajasthan and U.P. State Archives. One Senior Archivist and two Assistant Archivist Gr.-I are proposed to be sanctioned for this programme.

(v) *Private Records* :—There are countless collections of historical manuscripts, documents and rare books etc. available in private custody. The Department has already 128 private record collections by way of donations or purchase which throw light on various aspects of the socio-political-economic life of Delhi during the preceding two centuries. In view of the importance of such records as source material for the study of history, it is proposed to give more emphasis on survey and acquisition of private papers of freedom fighters, journalists, social reformers and other public figures of eminence.

(vi) *Repair & rehabilitation of records* :—It is proposed to equip the conservation workshop with the latest fumigation and lamination machines, besides, increasing skilled manpower for repair and rehabilitation of records which deteriorating due to unscientific storage vagaries of nature vandalism and natural decay. It is also proposed to provide technical guidance and assistance in conservation of manuscript collections available in private custody, as recommended in the Conference of Ministers and Secretaries of Culture of States/UTs held in Delhi during 1989.

(vii) *Reference Media to Records* :—To provide easy access to records for historical research, reference media to records, viz., indexes, subject lists, descriptive lists, inventories and guides etc. are prepared. At present, the Department is engaged in preparation of indices of records of the erstwhile Chief Commissioner's Office. Indices to records upto the year 1944 have been prepared so far and it is proposed to clear the backlog. Catalogues and indices of 351 maps (original/photo-copies) and about 1500 photographs in possession of the Department would also be prepared. Apart from this, descriptive listing of private record collections needs to be taken up, besides, calendaring of Persian records in custody of the Department.

(viii) *Publication* :—A general guide to records available in Delhi Archives was published during 1989-90. It is proposed to bring out different publications of archival material in 'compact and easy to use form'. The proposed publications will include various private record collections, important records series and documents including Mutiny Papers, i.e., records of 1857. The programme is most important for encouraging historical research studies. Four professional staff are required for its implementation.

(ix) *Reprographic Services* :—A modern Reprographics Unit is being set-up. Basic infrastructure for the Unit has since been provided and a microfilm camera installed & put into use. It is proposed to equip the Unit with the latest machinery. Procurement of reprographic equipment comprising of an automatic microfilm processor and a mobile microfilm camera is envisaged during 1992-93. The processor along is likely to cost about Rs. 9 lacs. Hence, additional funds to the tune of Rs. 4 lacs would be required. Mobile microfilm camera required for microfilming of records of Delhi's interest available with other State Archives/Institutions/Libraries etc. in SITU is now proposed to be procured during Annual Plan 1993-94, keeping in view financial constraints. A Microfilm reader-cum-printer and allied apparatus/tools etc. is also proposed to be purchased. Provision for staff is also proposed.

(x) *Search & Reference Work* :—The Department attends to queries from various Government Departments, Institutions and individuals for information, based on original records and Govt. Gazettes available with the Department, besides, allowing inspection of Revenue Records and supply of photo-copies thereof to people concerned on demand through the Deputy Commissioner's Office, Delhi. It is proposed to strengthen this Unit further in the public interest.

(xi) *Assistance to Research Scholars* :—The Department provides facilities to bonafide historical research scholars to consult 30 year old records. About 20 scholars are granted such permission every year. These scholars and many authorised officials from the National Archives of India, various State Archives & other institutions consulted the records in recent years. The Research Room is equipped with modern amenities. A post of Research Officer is needed.

(xii) *Reference Library* :—A reference library of about ten thousand volumes of rare books and other published material is being maintained. The Department also maintains Gazette of India (1882 onwards), Delhi Gazette (October, 1952 onwards), Punjab Gazette and other States Gazette Notifications containing information concerning Delhi. The Library holdings are required to be appraised, catalogued and classified. Most of the volumes also require fumigation, repairs and rehabilitation. Necessary equipment and staff are proposed accordingly.

(xiii) *Oral History Programme* :—Under this programme, reminiscences/memoirs of eminent persons in different walks of life who have played an important role in the Freedom Movement and recent history as well as the recollections/reactions of those who have seen history being made, are recorded in audio cassette tapes for the benefit of historical research. So far, memoirs of 70 persons, including Freedom Fighters, political leaders and social workers etc. have been recorded and transcription of 43 such recordings carried out. A sound proof room and necessary equipment is proposed to be provided for strengthening this programme.

(xiv) *Training Programme* :—It is proposed to take up a systematic programme for conducting training courses in record-management, record-administration and repair & rehabilitation of records for officials of various Departments/Local and subordinate Officers of Delhi Administration. For implementation of this programme, one post of Archivist and two posts of Assistant Archivist Gr.-I are proposed to be created during the 8th Five Year Plan 1992-97.

(xv) *Archival Consciousness Programme* :—With a view to focus public attention on the importance of Archives as part of our documentary heritage and to stress the role of archival institutions in preserving them for posterity, archival institutions have to take up an archival consciousness programme. Accordingly, the Department has taken up various activities such as, TV/Radio Programme/talks, celebration of Archives Week, holding of exhibitions of historical documents, rare books & photographs etc., besides, door-to-door survey and propaganda. It is also proposed to set up a permanent Exhibition Hall in the Administrative Block of Delhi Archives building during the Annual Plan 1992-93. A post of Research Officer would be required for selection of objects for the exhibitions and other work under this programme.

6. For taking up the new plan programmes and requisite expansion of then-going programmes as detailed above, creation of some additional posts is considered essential. The details of posts proposed to be created during the 8th Five Year Plan 1992-97 are as under :—

S.No.	Name of Post	Scale of pay in Rs.	No. of posts proposed to be created during					
			8th FYP		Annual Plan			
			1992-97	92-93	93-94	94-95	95-96	96-97
1	2	3	4	5	6	7	8	9
1.	Director of Archives	3500-5000	1	—	—	1	—	—
2.	Senior Archivist	2200-4000	2	1	1	—	—	—
3.	Archivist	2000-3500	3	1	1	—	1	—
4.	Field Officer	2000-3500	1	1	—	—	—	—
5.	Office Supdt.	1640-2900	1	—	—	1	—	—
6.	Asstt. Archivist Gr. I	1640-2900	9	5	1	1	1	1

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77..	Research Officer	1640-2900	2	1	1	—	—	—
88..	Asstt. Archivist Gr. II	1400-2300	5	1	1	1	1	1
99..	Asstt. Microphoto graphist	1400-2300	1	—	—	1	—	—
100..	Chemist Gr. II	1400-2300	1	1	—	—	—	—
111..	Librarian	1400-2300	1	1	—	—	—	—
122..	Sr. Preservation Asstt.	1200-2040	1	1	—	—	—	—
133..	Preservation Asstt.	950-1500	1	—	1	—	—	—
144..	L.D.C.	950-1500	3	—	—	1	1	1
115..	Photo Assistant	950-1500	1	—	—	1	—	—
116..	Book Binder	825-1200	1	1	—	—	—	—
117..	Record Atten. (Spl. Gr.)	825-1200	1	—	1	—	—	—
118..	Record Vacuum Cleaner	750-940	2	1	—	—	1	—
Total			37	15	7	7	5	3

2. Department of Archaeology—(Rs. 39 lacs)

The Department of Archaeology has been established in Delhi Administration with a view to conserve and preserve the monuments other than those of National importance. There are 1376 monuments in Delhi as per the 'list of the Muhammadan and Hindu Monuments' prepared in the first quarter of the present century out of which 1165 are maintained by the Archaeological Survey of India. It is obligatory for Delhi Administration to maintain the rest of the monuments which are of local importance through its Department of Archaeology.

Most of the monuments are in bad condition due to environments. It is not known as how many monuments have disappeared from the scene. It is high time to save atleast the remaining monuments in Delhi and preserve them for posterity. The Department of Archaeology has therefore launched a programme for survey, listing and documentation of the monuments to know the latest condition of the monuments. As per the preliminary survey the condition of the monuments in Delhi is extremely bad and they need extensive repairs. As the monuments are scattered all over the city it is difficult to exercise effective supervision. It is proposed to set up circle/site offices in Delhi, one in 92-93 and other in 94-95, for effective monitoring co-ordination of the activities relating to maintenance of these monuments.

There are three distinct type of activities relating to the monuments :—

- (a) Conservation, preservation and beautification.
- (b) Survey, listing, documentation.
- (c) Protection & security.

The following are the related activities for the development of the monuments to be executed in the 8th Five Year Plan :—

1. Structural conservation.
2. Chemical preservation and establishment of chemical lab.
3. Environmental development and horticulture operation around the monuments.
4. Beautification of monuments by providing flood lights, laying out approach roads and pathways and also public conveniences.
5. A few monuments to be developed as picnic spots/tourist places.
6. Fencing the monuments to ensure that they are free from encroachments.
7. Survey and listing of monuments area-wise and dynasty-wise.
8. Photo documentation & video filming of the monuments and setting up of photo section.
9. Preparation of drawings of monuments.
10. Preparation of survey plans and site plans.
11. Collection of Revenue date and demarcation of area.
12. Protection and notification, acquisition of land where the monuments are located on private property.

It is proposed to strengthen the engineering side by purchase of equipment etc. The conservation work and chemical treatment in phases will be done departmentally as the work needs special expertise to retain the ancient character of the monuments. Environmental development and beautification of the monuments by developing gardens, lawns etc. is also an important programme of the Department of Archaeology to attract the visitors and tourists. As the monuments are scattered all over the city and large number of monuments are not connected by road transport it is proposed to purchase atleast one vehicle for site offices for survey, listing and documentation as well as to supervise the activities of the monuments during the VIII Five Year Plan.

Almost all the States have framed their own Acts for protection of monuments. But there is no specific statutory authority or legal frame work for Delhi. The Administration drafted its own Act. 'The Delhi Ancient and Historical Monuments and Archaeological Sites and Remains Act' and hopes to implement it during the early phase of the VIII Five Year Plan. Many practical measures have been suggested in the proposed Act for effective control. The implementation of the proposed Act will make it obligatory for Delhi Administration to raise necessary infrastructure or the effective operation of the said Act, including provision for cost of land for acquisition around the monuments.

It is proposed to take measures for the protection and better administration of unprotected monuments, located in Delhi.

These monuments were earlier neglected due to ;—

- (i) the non-availability of adequate expertise.
- (ii) lack of required man power.
- (iii) paucity of funds and
- (iv) non-availability of a nucleus cell for better protection and preservation of the monuments of local importance.

In addition to the above, the department will also undertake the following programmes.

Exploration and Excavation :

Conducting archaeological exploration and excavations in Delhi is one of the plain programmes of Department of Archeology. There are about half a dozen sites in Delhi which need attention. It will take 3-4 years to excavate each site. To complete excavations at all these sites will take two decades. After completing excavations at each sites it will be necessary to prepare & publish a report. It is absolutely necessary to develop the excavation wing into a full fledged one in view of its importance. This unit will take up excavation at various sites like Bankneer, Jhatikera, Shiikarpur, Khedakalan etc. During the 7th five year plan the department conducted excavations at Mandoli, on the left bank of the river Yamuna which revealed that it was inhabited by the late Harappan people during 1500 B. C. to 1200 B. C.

Departmental Publications

It is proposed to bring out an annual bulletin of the department giving details of the activities of the department. This is a sort of professional report. The department will also consider bringing out excavation reports, picture post cards, guide books and monographs on various monuments.

Educational activities

To create awareness among the public about their cultural heritage it is proposed to educate them by organising exhibitions, seminars, workshops, symposium etc. as well as demonstrations with slides. School children and college students will be specially covered,

Research & Reference Library

The department is research oriented. It has to undertake research work in various fields and the results thereof are to be published. Scholars/Experts in various fields will be given assignments to undertake research either by employing them on contract basis or offering fellowship etc. It is essential to enrich the Library for reference purposes. A post of Librarian is proposed to be created in the 8th five year plan.

Archaeological Museum

Precious antiques were acquired from the Deputy Commissioner's Office and it is proposed to obtain more of them in the future. The department also got some

antiquities and other material after excavation at the Mandoli Mound and unearthed Delhi's ancient civilization which is likely to go back to the Late Harappan times. It is proposed to bring all these objects under one roof to visualise the importance of the city through the ages by setting up an Archaeological Museum in the present office premises or elsewhere.

Establishment

For the smooth functioning of the department and to carry out its pan programme, it is essential to strengthen the staff of the department for expertise and professionalism in the field of Archaeology. Creation of additional posts is considered essential for taking up plan programmes and the requisite expansion of the on-going programmes detailed above for better performance of the functions of the department. The details of 45 posts proposed to be created during the 8th Five Year Plan 1992-97 are as under :—

		1992-93	93-94	94-95	95-96	96-97
1. Director	3700-5000	—	—	—	—	1
2. Dy. Director	3000-4500	1	—	—	—	—
3. Archaeological Officer	2000-3500	2	1	1	—	—
4. Arch. Engineer	2000-3500	1	—	—	—	—
5. Head Clerk	1400-2300	1	—	—	—	—
6. Chemical Asstt.	1400-2300	1	—	—	—	—
7. Conservation Assistant	1400-2300	1	2	—	—	—
8. Legal Asstt.	1400-2300	—	1	—	—	—
9. Jr. Steno	1200-2040	—	1	—	—	—
10. Photo Asstt.	950-1500	—	1	—	—	—
11. Driver	950-1500	—	1	—	—	—
2. LDC/Typist	950-1500	1	1	—	—	—
13. Class-IV Peon/Mon. Attendant/Sweeper/Chowkidar/Mali etc.	750-940	10	5	5	5	5
Total		18	13	6	5	6

A sum of Rs. 39 lacs has been approved the scheme strengthening of Archaeology Department during the 8th Five Year Plan 1992-97. Out of which Rs. 5 lacs is for the Annual Plan 1992-93. A provision of Rs. 1 lac is also made for the scheme "Conservation of Urban Heritage" both in the 8th Plan and the Annual Plan 1992-93. The funds are to be released to DDA through the Archaeology Department.

3. GIA to Sahitya Kala Parishad—(Rs 250 lacs)

Sahitya Kala Parishad, was established in 1968 to promote Literature, Art and Culture in Delhi as a Cultural Wing of Delhi Admn. Since its inception, the Parishad has been carrying out various activities in these fields.

With the setting up of four language academies viz. Hindi, Punjabi, Urdu & Sanskrit the main thrust of the S.K.P. has been on Music, Dance, Drama and Fine Arts. The Parishad is ceaselessly striving towards fulfilling its objectives through activities promoting performing arts, fine arts, sculpture and various cultural activities and has been duly supporting and guiding various expressions of creativity.

The Parishad is also striving to foster a cultural and artistic awareness amongst the citizens of Delhi by implementing various programmes to propagate art and culture amongst common people and to serve and support artists on lists of Delhi. It awards prizes, distinctions, recognitions, to literatures and artists for their outstanding contribution in their respective fields. It also encourages up-coming talents in the field of dance, drama and music by sponsoring their performances and awards prizes and scholarships etc. The aged artists and literatures in indigent circumstances are given regular monthly financial help. To promote 'National Intergration and Cultural Unity' of the country the S.K.P. organises conferences, seminars and Inter-State Exhibitions and Cultural troupes.

The S.K.P. has been extending its activities to rural and re-settlement colonies and has also put up performances specially for the young.

Sahitya Kala Parishad is also ceaselessly striving to make Delhi the Cultural Capital of the country.

To implement the various programmes, a sum of Rs. 250 lacs has been approved for 8th Plan 1992-97 out of which Rs. 50 lacs is for 1992-93.

Delhi Administration intrusted the task of establishing a City Museum to the SGIP in 1990-91.

4. *Delhi City Museum—(Rs. 75 lacs)*

Possession of land has not been handed over to Sahitya Kala Parishad. The land is occupied by DESU, DTC and Municipal Corporation. The matter is being actively pursued and it is expected that the possession of the land will be handed over shortly.

In anticipation, Delhi Administration released a sum of Rs. 98.50 lacs during 1990-91 which was handed over to P.W.D., Delhi Administration as deposit work.

The Architect has given an estimate of Rs. 4 crores 95 lacs for the total project which may escalate due to price rise.

A sum of Rs. 75 lacs is approved for 8th Plan, out of which Rs. 21 lacs is for 1992-93. Additional funds are required to meet the expenditure as specified above.

5. *Delhi Gazetteer Unit—(Rs. 10 lacs)*

The Delhi Gazetteer Unit has following approved programmes for execution :—

1. Hindi edition of the Gazetteer of Rural Delhi.
2. History of Delhi Villages (Hindi & English)

3. Supplement to the Delhi Gazetteer (Hindi & English)
4. Brochures on National Leaders (Hindi & English)
5. History of Freedom Movement in Delhi (in 3 Vols.) (Hindi & English)
6. Cultural Heritage of Delhi (in 2 Vols.) (Hindi & English)

Of these schemes only the first two have been taken up for writing. The manuscript of the Hindi edition of the book 'Gazetteer of Rural Delhi' has already been sent to the Government of India Photolitho Press, Faridabad (Haryana) for printing. At present the proofs of the volume are being checked. It is hoped that the book will be brought out during the year 1992-93.

Besides the above, efforts are being made for the collection of material for the English edition of 'History of Delhi Villages' and 'Supplement to the Delhi Gazetteer' last published in the year 1974. For the completion of those task a post of one Research Officer (2000-3500) is required.

Likely achievements during 1992-93

After the collection and compilation of material, the draft manuscript of the 'History of Delhi Villages' will be sent to a scholar of repute, like Ex-Editor of the Delhi Gazetteer Unit to go through the manuscript and comments to that a standard work may be brought out during the year 1992-93. Besides the above, work on Hindi translation of the 'History of Delhi Villages' will also be taken up during the year 1992-93. A sum of Rs. 2 lacs is approved for 1992-93.

Targets for the 8th Five Year Plan (1992-97)

During the 8th Five Year Plan (1992-97), it is proposed to complete the following approved schemes, for which an outlay of Rs. 10 lacs is approved :—

1. Hindi edition of the Gazetteer of Rural Delhi.
2. History of Delhi Villages in English.
3. History of Delhi Villages in Hindi.
4. Supplement to Delhi Gazetteer in English.
5. Supplement to Delhi Gazetteer in Hindi.
6. Some brochures on National Leaders in English.
7. Some brochures on National Leaders in Hindi.

The remaining approved schemes will be taken up after completing the above schemes.

6. *Srengthening of Language Department—(Rs. 15 lacs)*

The Language Department of Delhi Administration was established in 1952 to ensure the implementation of progressive use of Hindi in the official work of the Administration, as envisaged and laid down in the Constitution. This Department was also made responsible for providing Urdu & Punjabi services in accordance with the provisions of the Language statement 1958 of Delhi State. The work responsibility and

Other activities of the Department has greatly increased, with the introduction of the Official language Act of 1963, revised 1967 and subsequent Official Language Act of 1975. The necessity and importance of the work relates to statutory requirements of the Constitution as well as of the Acts. The Department has to discharge the added work & responsibilities to control, look after and maintain the four Language Academies. It is necessary to strengthen the Language Department to fulfill and implement the Official Language Act and also the other requirements on one hand and to control, look after and maintain, the four Language Academies on the other hand. Thus the scheme provides for the creation of additional posts in view of the increased and widened sphere of work and responsibilities of the Department. The Scheme also provides for arranging and performing extra-curricular activities aimed at promotion and progressive use of Hindi in the official working of the Admn. Among these activities, language workshop scheme, Essay and sulekh, oral type competition, Type and Shorthand and purchase of books and other literature for promotion of Hindi Day/Week and all other programmes organised by department are included. Provision for purchase of equipments, furniture and stationery and wise charges are also included and provided for under the scheme.

The staff required is as follows :—

1. Director	1	3700-5000
2. Admn. cum-Accts. Officer	1	2375-3500
3. Sr. Instructor	1	1640-2900
4. Accountant/Supdt.	1	1640-2900
5. Legal Translator (Punjabi)	1	1640-2900
6. Legal Translator (Urdu)	1	1640-2900
7. Legal Translator (Hindi)	1	1400-2300
8. Instructor	1	1400-2300
9. Asstt. Inspector	1	1400-2300
10. Legal Translator	1	1400-2300
11. Planning Asstt.	1	1400- 300
12. Instructor (Urdu)	1	1400-2300
13. Instructor (Punjabi)	1	1400-2300
14. Punjabi Translator	1	1400-2300
15. Urdu Translator	1	1400-2300
16. Hindi Steno	2	1200-2040
17. U. D. C./Cashier	5	1200-2040
18. Steno-Typist (Urdu & Punjabi)	2	1200-2040
19. L. D. C.	5	950-1500
20. Class IV	3	750-940
21. Peon	3	750-940
22. Sweeper	1	750-940
23. Dak Messenger	1	750-940

Total	37
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To implement the Scheme, Rs. 15 lacs is approved for 8th Plan which includes Rs. 3 lacs for 1992-93.

7. *Hindi Academy, Delhi—(Rs. 205 lacs)*

Being a Welfare State, even the promotion of Art and Literature and its propagation among the masses comes within the ambit and the duties of the Administration. At the instance of Delhi Administration, three literary Academies viz. Hindi, Urdu and Punjabi were established and registered as Societies separately under the Societies Registration Act. The pattern of Assistance has been approved by Govt. of India, M/O Education and Culture (Deptt. of Culture). The Sanskrit Academy was also established. These Academies are responsible for promotion and propagation of Language and Literature in their respective fields in Delhi.

The Hindi Academy was set up on 31st Dec., 1981 under the Chairmanship of the Lt. Governor of Delhi. Executive Councillor (Education) is the Vice-Chairman. Eminent Scholars, Journalists, Literatures and Writers have been nominated by L. G. as member of the Governing body of the Academy. The Academy formulated more than sixty schemes in the field of Hindi language and literature. These schemes can broadly be divided into four major heads viz. (i) Awards, Prizes, Scholarships etc. (ii) Assistance & Help, (iii) Conferences, Seminars, Poets Meet etc. and (iv) Library & Publications & others. Through these schemes, the Academy recognizes and honours the valuable services and contribution of eminent writers and literatures. It also provides opportunities to young and upcoming writers. It has also been the endeavour of the Academy to project and promote the composite lingual culture for National Unity and Amity.

Schemes and Programmes for 8th Plan & 1992-93 :

(A) Awards, Prizes, Scholarships etc.

1. Literary Honour and Awards
2. Shalaka Award (on All India Basis)
3. Literary Book Awards
4. Award for Child Literateure
5. Young Writers Awards
6. Teachers Awards
7. Students Prizes
8. Research Scholarship
9. Monthly Students Scholarship

(B) Financial Assistance and Help

10. Assistance to Literatures
11. Writers Pension
12. Assistance for Publications
13. Assistance to Organisations
14. Assistance to small papers/magazines

«(C) Conferences, Seminars, Symposiums etc.

15. Education Seminar/Hindi Teachers Conference
16. Rajbhasha Sammelan
17. All India Literary Conference
18. Conference of Hindi Organisations
19. Monthly Literary Programmes
20. Celebration of Hindi Day/Week
21. Celebration of Sahityakar Jayanti
22. Organisation of Competitions etc.
23. 'EKTA GEET' Competition (for school students)
24. Combined or Sponsored Programmes in School and Colleges
25. Joint Programmes with Language Deptt.
26. Joint Programmes with Urdu and Punjabi Academies (for promotion of linguistic unity and culture)
27. Combined Programmes with volutary organisations/Institutions etc.
28. Meetings and Talks on Language and Literature
29. Aalok Parv—Hindi Workers Sammelan
30. Bank Rajbhasha Sammelan
31. Literary talks with eminent Scholars etc.
32. Seminar on Publication
33. Seminar on Journalism
34. Conference of Small Papers/Magazines

«(D) Poets Meet

35. Republic Day Poets Meet
36. Independence Day Poets Meet
37. 'UBHARTE SWAR'—(Young Poets Meet)
38. Hindi Teachers Poets Meet
39. Children/Students Poets Meet

«(E) Library and Reading Rooms

40. Establishment and Expansion of Libraries and Reading Rooms (Central and Zonal)
41. Establishment of Library-cum-Reading Rooms in Resettlement Colonies
43. Mobile Libraries Scheme
43. Establishment of Hindi Centres
(for training & courses of Hindi Type, Shorthand and Hindi Language)
44. Assistance to Libraries and Reading Rooms run by voluntary organisations.

(F) Publications

45. Publication of 'Delhi Writers Directory'
46. Publication of 'Hindi Manual'
47. Collection and Publication of Manuscripts
48. Publication of Magazine
49. Encouragement and Publication of Children Literature
50. Collection and Publication of Delhi Folk Songs and other Literature
51. Encouragement and Publication of Literature for promotion of National and Emotional Integration
52. Other Publications for propagation of Hindi

(G) Other Misc.

53. Language Workshop Scheme
(for training of Hindi Translation and Noting and Drafting)
54. Translation Scheme
(translation of selected literature of other Indian Language into Hindi and vice-versa)
55. Sponsored Programmes at Radio/T.V.
56. Interviews and Recordings of Discussion with scholars and intellectuals.
57. Talent Research
58. Hindi Film Scheme
(for promotion of National and Emotional Unity)
59. Special Programmes under 20-Pt. Programme
60. Writers Tour Scheme
61. Hindi Mela & Exhibition
62. Encouragement to writings on scientific and other technical subjects
63. Encouragement to writings for promotion of National awareness amongst students and youth
64. Hindi Students Forum
65. Hindi Research Scheme
66. Hindi Telephone Service
67. Hindi Oral Writing Scheme
68. Hindi Video Scheme
69. Writers Cottage Scheme
70. Misc.

To implement the programmes Rs. 205 lacs is approved for 8th Plan 1992-97 out of which Rs. 45 lacs is for 1992-93.

8. Punjabi Academy, Delhi—(Rs. 251 lacs)

The Punjabi Academy was established in 1981-82 for the promotion of Punjabi Language, Literature and Culture as an integral part of the linguistic culture in Delhi.

With the passage of time the Punjabi Academy has assumed the role and status of a Premier Punjabi Literary and Cultural organisation for Punjabi Language, Literature and Culture. Ever since its inception the Academy has taken up various activities under the following 6 major areas :—

1. Promotion of Punjabi Linguistic Culture.
2. Promotion and Propagation of Punjabi Literary Activities.
3. Publication of Books and Journals.
4. Punjabi Language Development Programme.
5. Research work and other programme for promotion and development of Punjabi Language.
6. Encouragement to Punjabi Writers/Artists/Journalists and other Punjabi Culture promoters.

The pattern of Assistance governing the release of Grant-in-aid was approved by the Central Government. The academy is concerned with the organisation of Cultural and Literary Programmes which primarily and basically depend upon the availability of Halls/Auditoriums, the response of cultural institutions etc.

The Academy has 2 Mobile Film Vans through which Punjabi feature films are shown in different parts of Delhi. 2 more film vans are proposed to be purchased to cover all the 4 Districts. One film van, will become due for replacement during the year 1993-94.

The Academy has been providing financial assistance to Punjabi writers for publication of their books. Punjabi books are also being purchased direct from authors so as to promote the language as well as to encourage Punjabi writers.

Through poetry, literature and publications the Academy has been trying to bring about National Unity and Integration. It has been holding Seminars, Symposia and Conferences. The Academy has also been making use of mass-media like Radio to reach the maximum number of people with the best of Punjabi Folk lore and other items of social interest. The AIR has since allotted timings in Vividh Bharti for half an hour for giving Punjabi Cultural Programmes. This programme has been welcomed the public and the Academy has been receiving requests for longer programmes.

It is proposed that the Academy should have its own building and the deptt. proposes to purchase land in 1993-94. A staff vehicle has been condemned and provision has been made for its replacement during 1992-93. Organisational expenditure is also included in the proposal.

For the 8th plan 1992-97, an outlay of Rs. 251 lacs is approved which includes Rs. 45 lacs for 1992-93.

9. *Punjabi teaching in schools—(Rs. 9 lacs)*

The Punjabi Academy implemented the scheme of Punjabi language teaching programme from the year 1985-86 but in the year 1988-89, a separate Plan outlay of Rs. 65.00 lacs was agreed to by the Planning Commission under the 'General Education' sector as grant-in-aid to the Punjabi Academy, Delhi for providing part-time Punjabi language teachers in the schools.

Under the scheme, part-time Punjabi language teachers are provided by the Academy in the Govt., MCD, NDMC, Govt. Aided and Recognised schools till a regular Punjabi language teacher is made available.

The following part-time teachers were provided till this date :—

Year	No. of part-time teachers provided	Total Expdr. (Rs. in lacs)
1985-86	70	0.96
1986-87	450	11.42
1987-88	1159	33.11
1988-89	1234	66.46
1989-90	1488	68.17
1990-91	1445	84.00
1991-92	1445	74.56

The part-time Punjabi language teachers are being paid consolidated monthly remuneration as follows :—

Level of Teaching	Remuneration per teacher per month
	Rs.
Primary Classes	600/-
Middle Classes	700/-
Sec/Sr. Sec. Classes	800/-

In addition, Supervisors for supervising the work of the part-time teachers in the field are also appointed who are at present being paid a consolidated monthly remuneration of Rs. 1,000/- per month. At present, there are 14 such Supervisors.

The text books are being supplied free of cost to the students upto the primary level and training/orientation courses are also being organised for such part-time teachers.

The Planning Commission, while considering the annual plan for the year 1991-92, expressed the view that the scheme of providing teachers in the schools for teaching Punjabi language should be implemented by the Directorate of Education. The whole issue was discussed in a meeting held under the Chairmanship of the Chief Secretary, Delhi Administration. It was decided that the Directorate of Education may formulate a scheme in this regard and in the meantime the teachers already appointed may be allowed to continue in the Punjabi Academy. The future set up of the scheme has not yet been decided. The Academy is not sure as to when the scheme were finally be taken over by the Education Directorate. Till then the scheme will be with the Academy.

An outlay of Rs. 9 lacs is approved for the 8th Plan including Rs. 5 lacs for the Annual Plan 1992-93 as token provisions.

Upto the Annual Plan 1991-92 this scheme has been reflected under General Education Sector.

10. *Library facilities for weaker sections—(Rs. 15 lacs)*

An outlay of Rs. 15 lacs is approved for the 8th Plan 1992-97 to provide library facilities to the weaker sections of society. The Punjabi Academy runs about 55 libraries in such areas, grants-in-aid are provided by Delhi Admn. for the purpose. An outlay of Rs. 15 lacs is approved for the 8th Plan including Rs. 2 lacs for the Annual Plan 1992-93.

11. *Urdu Academy—(Rs. 190 lacs)*

The Urdu Academy was set-up in May, 1981 during the VIth Five Year Plan for promotion, propagation and the development of Urdu Language and Literature.

During the VIIth Five Year Plan and Annual Plans 1990-91 and 1991-92 the Academy received financial assistance from Delhi Administration.

The schemes/programmes implemented during the Five Year Plans and Annual Plans and Annual Plans can be broadly classified as under :—

1. Scholarships/Prizes to highly meritorious students.
2. Urdu for Adults.
3. Classes for Govt. Employees.
4. Calligraphy Centre.
5. Varied Cultural Programmes.
6. Seminars and Workshops.
7. Awards for Literary Excellence.
8. Financial Assistance to aging/ailing writers and/or their dependents.
9. Financial Assistance for Publication of books.
10. Financial Assistance to Research Scholars.
11. Publication of creative works and magazines.

During the Short Span of 10 years the Urdu Academy has rightly earned the distinction of being the very best institution for promoting Urdu and the Composite Lingual Culture in India.

During the 8th Five Year Plan the Urdu Academy proposes to continue the existing 30 schemes because of their importance, popularity and public demand. But the emphasis will be on the eradication of illiteracy.

1. **Adult Education :—**A scheme for eradication of illiteracy under the National Policy of Education, 1986, was introduced in October, 1989. Initially 132 Adult Education Centres were opened in the Walled City and some parts of trans-Yamuna Area. During 1989-90 1350 Adults were educated. A survey was conducted by the Urdu Academy in the Mustatabad locality in the trans-Yamuna area where it was found that 95 percent of the population was uneducated. There are no schools within 3 Kms. The Governing Council of the Academy in their meeting held on 11th March, 1991 decided to adopt this area where 162 Adult Education Centres were opened during 1990-91 and 2000 Adults were educated. The present enrolment is 4000 in about 192 centres. There are about 150 learners who are anxious to continue

higher studies and the Academy proposes to provide them facilities upto the Xth standard. Other programmes envisaged by the Urdu Academy during the 8th Plan period are Special coaching for competitive examination for students of Urdu medium purchase of one Urdu Computer and creation of necessary posts to implement the programmes.

For all these programmes an outlay of Rs. 190 lacs is approved for the 8th Plan including Rs. 45 lacs for the Annual Plan 1992-93.

12. Urdu in Schools—(Rs. 15 lacs)

To supplement the efforts of Delhi Administration, the Urdu Academy provides part-time teachers in Urdu Medium Schools from Primary Level to Sr. Secondary Level. This scheme was approved by the Planning Commission during the 7th Five Year Plan. The Teachers are appointed on a part-time basis for one academic session and are paid as per rates indicated below :—

	Rs.	
1. Trained Under Graduate Teachers	500/-	P.M.
2. Trained Graduate Teachers	600/-	„
3. Trained Post Graduate Teachers	700/-	„

These teachers are retained till regular arrangements are made by the MCD, N.D.M.C. or Delhi Administration.

240 part-time teachers, are working in such schools as on date. The demand for teachers is increasing every year. During the 8th Five Year Plan, the requirement of teachers for Urdu Teaching programme is estimated at 450 to 550 teachers.

Supply of Free Text Books to financially weak students and other programmes are also envisaged under this scheme. This scheme was reflected under the General Education Sector till 1991-92. An outlay of Rs. 15 lacs is approved for the 8th Plan including Rs. 3 lacs for the Annual Plan 1992-93. This scheme will be entrusted to the Education Deptt. as per the advice of the pty. commission. Existing arrangements will continue till the Education Deptt. effects changes.

13. Delhi Sanskrit Academy—(Rs. 75 lacs)

Sanskrit is the mother of all Indian languages, keeping in view the importance of Sanskrit, the Government of India and the State Government are making efforts to promote, propagate and develop this language. Sanskrit Academies are functioning in U. P., Rajasthan, M. P. and other States. The Sanskrit Academy of Delhi was setup in 1987, to promote, propagate and develop Sanskrit. A Notification was issued by the Lt. Governor, Delhi vide No. II (8)/87-Lang. dated 30-3-1987 and this Academy was also registered under the Societies Registration Act, 1860 vide registration No. S-17783 dated 17-6-1987. The Scheme was approved by the Ministry concerned and the Planning Commission. The pattern of assistance of the Academy was approved by the Government of India, Ministry of Human Resources Development (Department of Education) vide their letter No. F. 5-17/88-UT-I dated 30-3-1988.

The Academy has organised a number of programmes like All India and Local Savi Sammelan, Vedic Sammelan, All India Sanskrit Journalist Sammelan, Symposiums,

Debates and discussions on various subjects relating to Sanskrit and its relation with politics, other Indian Languages, Dharmas, Vedas, etc. etc. for the best sense of brotherhood and national integration, honour to the renowned Sanskrit scholars, Members of Parliament who took their oath in Sanskrit, Schools giving commendable results in Sanskrit subject etc. etc. The Academy has been organising various competitions like Shlok Sangeetkam. Sanskrit plays/dramas, promoting young Sanskrit poets etc. Prizes for original work in Sanskrit in areas like poetry, prose, story writing, critical writings, children literature etc. are given every year on an All India basis. The Academy has also arranged workshops for Sanskrit teachers. The Academy has brought out its quarterly journal titled "Sanskrit Manjri" and has taken up the project of publishing a book entitled "Mahabudhvathu" in a number of volumes—two volumes of which have already been published. The Academy has published a book entitled "Bheemshatkam" in Sanskrit with Hindi and English translations. The Academy has also started preparations for a Tele Film "Chander Sekhar Azad" in Sanskrit with a view to inculcate the spirit of national integration.

The Scheme/programmes to be implemented by the Academy during the 8th Five Year Plan period are given broadly as under :—

1. Conferences like All India Sanskrit Kavi Sammelan and World Sanskrit Sammelan.
2. Symposiums.
3. Honours to Scholars and schools.
4. Competitions in poetry, essay writing and debates.
5. Prizes to authors of original works in Sanskrit, teachers, meritorious Students.
6. Financial Assistance to Sanskrit Scholars in distress etc.
7. Sanskrit Teaching by Correspondence, teachers work shop etc.
8. Birth Anniversaries/Centenaries of deceased Sanskrit Scholars/Personalities.
9. Exhibitions relating to Sanskrit Writings etc.
10. Collections of Sanskrit Literature.
11. Sanskrit Sangeetatmak Karykrama.
12. Scholarships to Students.
13. Publication like Sanskrit Manjri.
14. Library Setting up of Sanskrit Libraries in different areas of Delhi.
15. Other Miscellaneous Schemes like Sanskrit Telefilm.

The Academy has two motor vehicles which are in-sufficient. Necessary provision has been made for establishment charges, other office expenses, two motor vehicles and telephones. The following posts in addition to the existing staff are needed.

	Rs.	
1. Dy. Secretary	2200-4000	1
2. Programme Officer	2000-3500	1
3. Office Superintendent	1640-2900	1
4. Junior Accounts Officer	1640-2900	
	2000-3200	1

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5. Translator	1400-2300	1
6. Head Clerk	1400-2300	1
7. Sr. Stenographer	1400-2300	1
8. Jr. Stenographer	1200-2040	2
9. U. D. C.	1200-2040	1
10. L. D. C.	950-1500	1
11. Driver	950-1500	3
12. Class IV	750-940	3

To implement the Scheme Rs. 75 lacs has been approved for 8th Plan 1992-97 which includes Rs. 15 lacs for 1992-93.

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