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ANDAMAN AND NICOBAR ADMINISTRATION

**APPROACH  
TO  
THE FIFTH FIVE YEAR PLAN**

*Issued by :*

**THE PLANNING DEPARTMENT  
ANDAMAN AND NICOBAR ADMINISTRATION**

## PREFACE.

The Approach Paper to the Fifth Five Year Plan of the Union Territory of Andaman and Nicobar Islands has been prepared in two parts. Part I deals with the problems and prospects of the Islands' economy in general and deals with the approach to the Fifth Plan in perspective; Part II gives the details sector-wise. An attempt has been made to give as many details as possible under each sector. Specific schemes will be drafted out once the approach is agreed to.

The projected requirements for the Fifth Plan are much higher than those for the Fourth Plan. The tentative outlay proposed for the Fifth Plan is Rs.5365 lakhs in the State Sector whereas the original outlay of the Fourth Plan was only Rs.1400 lakhs. Wherever necessary, policy decisions have been suggested for acceptance by the Government of India.

The man-power requirements as given in the appendix are based on rough assessments made under each sector on the lines indicated in the Approach Paper. It need hardly be mentioned here that the figures of outlay and the requirements under each sector as indicated in the approach Paper are purely tentative and subject to review.

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\* PART I \*  
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ANDAMAN AND NICOBAR ISLANDS  
APPROACH TO THE FIFTH FIVE YEAR PLAN.

CHAPTER I - GENERAL

The Union Territory of Andaman and Nicobar Islands consists of over 300 islands with a total geographical area of 8293 square kilometers. They are situated between 6° and 14° north latitude and 92° and 94° east longitude in the Bay of Bengal with the 10° channel separating the Andaman group of islands from the Nicobar group. The islands lie in a long, narrow, broken chain approximately north-south, in an arc. It is logical to presume a former land connection from Cape Negrais at the southern tip of Burma to Achin Head (Cape Pedro) in Andalus (Sumatra). The flora and fauna of these islands would however imply that this land connection, if it existed at all, should have been prior to the development of their present life forms. Port Blair, where the headquarters of this Territory's administration is located, is 1,255 Kms away from Calcutta and 1,191 Kms from Madras. Calcutta and Madras are the two ports through which the islands maintain communication with the mainland. The Andaman and Nicobar Islands constitute the most isolated part of India, surrounded by vast stretches of sea in every direction.

The Andaman group (including the Ritchie Archipelago) stretches over 464 Kms. in length with a maximum breadth of 51 kms. The average width, however, is only 24 Kms. The Nicobar group, generally known as the southern group of islands (excluding Little Andaman), covers 294 Kms from one

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end to the other and has a maximum breadth of 57 Kms. Of the many islands that constitute this Union Territory some like North Andaman, Interview, Middle Andaman, Havelock, South Andaman, Rutland, Little Andaman, Car Nicobar, Teressa, Camorta, Mancowrie, Katchal, Little Nicobar and Great Nicobar are comparatively large in size. The others are small, some of them having an area of barely a fraction of a square kilometre. The area of Andaman group of islands is 6340 sq. Kms and that of the Nicobar group, 1953 sq. Kms.

#### Terrain.

The terrain is generally mountainous with ranges of hills enclosing narrow valleys. The configuration of the land clearly points to these islands being the visible ridges and summits of sunken ranges of mountains. Saddle Peak at a height of 732 meters above sea level is the highest point in these islands. There are no great elevations and the slopes are moderate to steep and rugged. They are susceptible to heavy soil erosion. Flat lands are comparatively scarce. The valleys in Betapur and Diglipur in Northern group of islands constitute the main flat lands in the Andaman group.

The Nicobars are surrounded by coral reefs and shallow seas. Long, narrow stretches of sandy beaches are a salient feature of the topography here. Car Nicobar and Katchal are almost flat, while the others have a hilly terrain, the highest elevation being 700 meters. In Little Nicobar and Great Nicobar, the land surface is very irregular cut up by steep hills and valleys.

Population.

Large scale influx of people into this Territory in search of employment opportunities, induction of families for settlement in these islands under the Rehabilitation programmes and increase in the strength of the Defence personnel stationed here together with the normal growth rate have spurred the population figure from 63548 in 1961 to 1,15,133 in 1971 - an increase of over 80% in a decade. This abnormal increase in population has brought in its wake problems of unemployment, shortage of cultivable land, rise in prices of consumer commodities etc.

The population of tribal people in these islands, as ascertained during 1971 census is as follows:-

Nicobarese	-	17,874
Onges	-	112
Andamanese	-	24
Shompens	-	92
		<hr/>
		18,102
		<hr/>

It has not been possible to ascertain the exact number of the Jarawas and the Sentinalese owing to their unfriendly attitude to other people. However, it is presumed that their numbers are 500 and 50 respectively.

Climate.

These islands have a tropical climate with an average rainfall of about 3000 mm. Humidity is as high as 80%. Temperature varies from 23.2 C<sup>o</sup> to 30.7<sup>o</sup> during the year.



Administration.

The Andaman and Nicobar Islands are a single District Union Territory administered by the President of India through the Chief Commissioner. There are 4 sub-divisions and 6 Tahsils. The total number of revenue villages (excluding the traditional villages of Nicobar group) is 171. Port Blair, the headquarters of the Administration, is situated in South Andaman.

Land Utilisation.

Out of the total geographical area of 829275 Hects. an area of 42596 Hects. has so far been released for non-forest purposes. 9260 Hect. of flat land and 7945 Hect. of hilly land, have been allotted to cultivators and it is expected that by the end of Fourth Five Year Plan period the area under cultivation will be 20,000 hect. of flat land and 15,000 hect. of hilly land.

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CHAPTER II  
PERSPECTIVE.

Planned development in Andaman and Nicobar Islands started from the Second Five Year Plan onwards only. Always regarded as a penal settlement, these islands did not get the attention that they deserved for the exploitation of their development potential till Independence. In 1947, the Andaman Islands were opened up mainly for settlement of refugees from the erstwhile East Bengal and to a lesser extent for the surplus population from Kerala and evacuees from Burma and Ceylon. The Nicobar Islands inhabited by the tribal people were however excluded from the areas of settlement. Settlement of ex-servicemen at Great Nicobar came about at a much later stage - only in 1969-70. Even now, the Nicobar Islands excluding part of Great Nicobar, remain a reserved tribal area and are not available for settlement of people from the mainland.

Development programmes of the Union Territory of Andaman and Nicobar Islands have to be looked at differently from the programmes that are implemented elsewhere in India. There are three basic factors that have to be taken into consideration before drawing up any programme for implementation in these islands.

- (i) These Islands are separate from the mainland by vast stretches of sea. It will not be an exaggeration to say that even inspite of the increased communication facilities, these islands even now are many days away from the mainland.

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The distance, has added to its problems of accessibility, transportation and communication.

- (ii) The stigma attached to these Islands as a penal settlement has stood in the way of rapid economic development. It has blocked the free flow of private enterprise to these islands, and thus in the initial stages thrust upon the State the entire burden of development in all its aspects.
- (iii) Lack of knowledge about these Islands on the mainland is the third vital factor that has had its significant impact on the growth of the Islands' economy. The problems that are peculiar to these Islands and the potential that is available here have till recently remained unknown to the people of the mainland with the result that no comprehensive economic development programme could be chalked out in the proper perspective for implementation here. The position, however, changed in the second half of the fifties and people began to realise the strategic importance of these Islands and the potential that these offered for development. This resulted in the implementation of an integrated **Second Five Year Plan** here. The Inter-Departmental Study Team, which visited these Islands in 1965 highlighted the potential of this Territory and probed into the possibilities of future development. Such awareness about these Islands is fortunately spreading, but it will still take a few years for its impact to be felt in the economy in a significant measure.

The two regions - the Andaman group and the Nicobar group - are quite dissimilar in many ways. The Andaman Islands are wholly hilly and mountainous, covered with dense forests. The tribal people of these Islands are of Negroid stock. The Nicobars, on the other hand, include some coastal stretches of flat lands with plenty of fresh water sources. The tribal people of these islands have affinities to the Mongoloid group and are better organised in their social and village life than the tribals of the Andaman group. Curiously enough, padauk, the most valued timber of Andaman group of Islands is completely absent in the Nicobar group. The same more or less is the case with gurjan, the commonest timber in Andamans. On the other hand, coconut and arecanut which are so much in evidence in the Nicobars, do not occur so naturally in Andamans. It seems almost as if nature had planned diversification of activities as between these two group of islands. There is however no gainsaying of the fact that both are rich in natural resources and offer tremendous potential for their utilisation in their own way.

Any development programme of these Islands that has not taken into account these peculiarities is bound to be only a shot in the dark. The prime need before embarking upon any programme of economic development, was to set up an infrastructure within which the economic system could develop its own momentum. And any such programme must necessarily

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take into account the peculiar geo-physical nature of this Territory and also the original inhabitants of this place - the tribals.

The strategy of economic development can be worked out only after due consideration has been given to all these factors.

#### Advent of Planning.

As pointed out earlier, planned development of Andaman and Nicobar Islands began in 1956 with the advent of the Second Five Year Plan. When the whole of India entered the Plan era in 1951 with the launching of the First Five Year Plan, this Territory did not have an integrated plan of development. Only two Schemes viz. colonisation and construction of roads were implemented here during that period. An area of 18100 acres of land was cleared and 1006 families were settled. Road survey was completed for a length of 49 miles. Work was also started on construction of  $2\frac{1}{2}$  mile length of roads. The programme also included improvements to the existing roads. Against an approved outlay of Rs.558.050 lakhs, the total expenditure incurred during the First Plan was only Rs.85.472 Lakhs.

The second and Third Five Year Plans were taken up on a bigger scale. Against an approved outlay of Rs.603.135 lakhs for the Second Plan and Rs.979.320 lakhs for the Third Plan, the expenditure was Rs.364.867 lakhs and Rs.636.202 lakhs respectively. Lack of experience in implementing an integrated five year plan, delay in obtaining sanctions relating to creation of posts and recruitment of personnel absence of an adequately organised Public Works Department

to take up the construction works on a large scale, inadequate means of communication affecting transportation of men and materials from the mainland to these Islands and also within the Islands, shortage of equipment and key materials, etc. were some of the factors that contributed to the short-fall. More or less the same factors contributed towards further short-fall during the three annual Plans when it was possible to have a developmental expenditure to the tune of Rs.528.878 lakhs only against an approved outlay of Rs.687.702 lakhs. In addition to these allocations, the Planning Commission had approved an outlay of Rs.42.48 lakhs during the Second Plan and Rs.42.580 lakhs during the Third Plan for development of Minor Ports in this Territory under the Central Plan. Shortfalls were experienced here also.

Even a cursory study of the investment pattern from the Second to the Fourth Plans would reveal that considerable importance was placed on the development of transport and communication facilities in this Territory. Investment in 'Social Services' ranked second in priority. It was only in the fitness of things that priorities were drawn up on these lines, for, without a properly organised communication system, investment in any project would be futile. The quantum of investment, however, was of a smaller magnitude when compared to the investment in these sectors elsewhere in India. The capacity of an economy to absorb investment is quite limited when it has only a limited population, but this capacity increases more than

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proportionately as schemes; small though they are, are implemented one by one. Awareness of this fact was evidenced by the increased outlay on projects from year to year in this Territory. The progress or otherwise of the economy in the initial stages of development is not to be gauged by the amount of developmental expenditure that it could incur, nor by the extent of shortfalls that had occurred. Breaking of the proverbial vicious circle in an undeveloped economy itself is a time-consuming process and any assessment of the success or otherwise of a scheme or plan in the short run would be premature and superfluous. The plans in the initial stages would have served their purpose, if they had set in motion the process of development, however small it may be, or imparted mobility to the factors of production in the economy. A study of the plan programmes of these Islands upto the end of the Fourth Plan would reveal beyond doubt that this objective has been fully achieved in these Islands. Having achieved this, what is needed is a 'Critical Minimum Effort' to lift the economy from the quagmire of underdevelopment to a self-sustaining process of self generating economic development. It is felt that inspite of the three full fledged plans and the three Annual Plans that intervened before the Fourth Plan, the economy of the Islands is still in the preliminary stage of economic growth and unless " a big push " is given, no useful purpose will be served in continuing the schemes on the present lines. Needless to emphasise, the strategy of development in the Fifth Plan has to be worked out carefully with

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a view to engendering balanced regional development in these Islands with accent on regional diversification and specialisation in some sectors without neglecting the basic development needs of other sectors. It is in recognition of this fact that while drawing up the approach paper to the Fifth Plan, ambitious schemes have been proposed under many sectors. These schemes have, of course, been based on the experience gained so far in the respective fields in the previous plans, but comparison of the magnitude of investment or the goals set in each sector with those for the previous plans would however be irrelevant. It is not the intention to proceed to the Fifth Plan on the assumption that whatever was done in the previous plans was right or whatever strategy that was evolved in the previous plans was foolproof, but what is attempted at is only an appreciation of the problems and the potential that each field has to offer in these Islands today.

The strategy of the Fifth Plan as far as these Islands are concerned will be basically to develop the infrastructure and to maintain whatever was built up during the previous plans, and then to exploit fully the potential in each sector. Naturally enough, once again considerable importance has been given to the development of 'Transport and Communications' and 'Social Services'. It is also planned to simultaneously develop other sectors with varying degrees of emphasis. A significant aspect of the Fifth Plan is the heavy investment proposed in the hitherto untouched or underexploited sectors of the economy like Fisheries, Industries, Animal Husbandry,



Tourism etc. It seeks to bring about specialisation in agricultural pursuits as warranted by regional variations in the terrain. It is also proposed to give enough scope for private enterprise to play its role for the development of these Islands. Many of these will require broad policy decisions by the Government of India. Ambitious schemes have been proposed for the development of the original inhabitants of these Islands and also to provide more and more employment opportunities to the people here. In fact all the schemes in the various sectors have been drawn up with adequate emphasis on the generation of employment potential. Proper man-power planning is also envisaged with a view to ensuring optimum utilisation of the natural resources and the employment potential generated.

CHAPTER III

PROGRESS UNDER PLANS

This chapter attempts at a cursory review of the progress made under the various Five Year Plans and the Annual Plans implemented in this Territory. The review has been made sector-wise in the order of the priorities attached to the sectors in the various Plans.

Transport and Communications.

That an adequately developed transport and communications system is an essential pre-requisite for developmental programmes was recognised right from the beginning of the planned era in this Territory. When the Second Plan started the position was not too happy. There were only 166 K.Ms of roads in the whole of this Territory. During the First Five Year Plan, of the two schemes implemented in this Territory one related to construction and improvement of roads and an amount of Rs.17.440 lakhs was spent on this upto 1956. Considerable importance was given to the construction of roads and an amount of Rs.497.960 lakhs was spent upto the beginning of the Fourth Plan. The Fourth Plan, as revised includes a provision of Rs.462.843 lakhs for 'Roads'. The road construction programmes undertaken so far includes the construction of the Andaman Trunk Road, which when completed in the Fifth Plan will join with the Southern most point of South Andaman with Diglipur, the Northern island in the Andaman group of islands. This road will have a length of 333 K.Ms and would involve an expenditure of about Rs.750 lakhs.

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The increasing population and the various developmental projects being implemented in this Territory have created considerable mobility in the economy and it is only natural and there should be an increasing pressure on motor transport facilities. The State Motor Transport Service started in March, 1956 with a fleet of 5 buses has now a fleet of 42 buses and this is expected to go upto 57 by the end of the Fourth Plan. The Plan expenditure incurred on this by the end of the Fourth Plan will be to the tune of Rs.31.241 lakhs.

Ports and harbour facilities and Shipping assume considerable importance in the context of the peculiar geographical position of these islands. The programme for development of minor ports in these islands could not make much head-way during the Second Plan since it took time for finalising the details of work. However, the position has improved now and by the end of the Fourth Plan it is expected that these islands will be in a position to boast of two wharfs—one at Haddo and the other at ~~Chatham~~ in Port Blair - a breakwater in Little Andaman and jetties at 29 places. 15 pontoons, 14 barges and 18 ships of different capacities will be available for exclusive use in this Territory by the end of the Fourth Plan.

#### Social Services.

##### (a) Education.

When planned development started in these islands the number of children going to schools stood at 1945. The number of Primary Schools, Middle Schools and Higher Secondary School was 22, 2 and 1 respectively. There was no college

in this Territory. An amount of Rs.146.429 lakhs was invested in 'Education' from the Second Plan to the end of annual plan 1968-69, and the position has improved considerably now. An amount of Rs.180 lakhs is proposed to be invested during the Fourth Plan period in 'Education'. As at present the number of school-going children is 22,432. The number of educational institution has also increased to 141 Primary Schools, 22 Middle Schools and 11 Higher Secondary Schools. It is expected that by end of 1980-81 it will be possible to have universal compulsory free education upto VIII Standard for the children in the age group of 11 to 14. Literacy in this Territory stands at 43.59% including the age group 0-4 and 51.15% excluding the age group 0-4.

With the spread of education the need for diversification in this field has also cropped up. Primary steps to set up a Polytechnic or an Industrial Training Institute are being taken now. It is expected that this will be achieved during the Fifth Plan period.

(b) Medical and Public Health.

Medical and Public Health facilities in Andaman and Nicobar Islands have increased considerably over the years. When the Second Plan started, these islands had only 11 dispensaries and 4 hospitals having a total of 358 beds. There were only 16 doctors. The position by end of the third year of the Fourth Plan shows 62 dispensaries and hospitals with a total of 535 beds and 36 doctors. The doctor-population ratio is among the highest. By the end of the Fourth Plan, an amount of Rs.28.331 lakhs would have been spent on 'Health' under Plan. Malaria eradication and filaria control programmes are also being implemented in this Territory. A good beginning has also been made in combating incidence of V.D.

Agricultural programmes:

The total cultivated area which stood at 3600 hectares at the beginning of the first Plan has now increased to 11344 hectares in 1970-71. Paddy is the main crop in the Andaman group of Islands and Coconut in Nicobars. The area under paddy-crop increased from 3748 hectares in 1955-56 to 10655 hectares in 1971-72. Against the production of 3133 tonnes of rice during the 1955-56, the production during 1971-72 touched a figure of 13,300 M.tonnes. The area under coconut and arecanut plantations increased by 2100 hectares and 613 hectares respectively from 1955-56 to 1971-72. The principal technical programmes in the field of agricultural production related to supply of fertilizers and manures, seed multiplication and distribution, plant protection and popularisation of improved agricultural practices. The various plans included provisions for supply of improved seeds, fertilizers and agricultural implements at various rates of subsidy.

Nothing much could be done in the field of minor irrigation for want of proper survey and investigation. The Investigation Wing of the Central Water and Power Commission has recently started survey of irrigation potential in these islands and suitable schemes will be formulated only after the results of the survey are known.

In view of the hilly and undulating terrain of these islands, soil conservation programmes assumed tremendous importance. The people have become fully aware of the need for

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adoption of soil conservation measures. The achievements in this field have now exceeded the targets set. By the end of the Fourth Plan, an area of 578 hectares would have been brought under soil conservation measures.

The demonstration farms of the Department of Agriculture have proved it beyond doubt that the hilly terrain of these islands is pre-eminently suited for the cultivation of spices. There is a general awareness among the farmers not to take to cultivation of spices in areas where adequate soil conservation measures have been taken. A Coconut and Spices Research Project under the aegis of the Central Plantation Crops Research Institute under the control of the Indian Institute of Agricultural Research has also started functioning in this Territory. It is expected that during the Fifth Five Year Plan considerable diversification will have to be effected in the field of agriculture for the optimum utilisation of the cultivable area. By the end of the Fourth Plan, an amount of Rs.41.915 lakhs would have been invested during the five years in the field of Agriculture, Minor Irrigation and Soil Conservation.

#### Animal Husbandry.

The livestock population of this Territory at the beginning of the Second Plan consisted of about 15,745 cattle, 8,615 goats and 14, 216 pigs. Most of them were of inferior quality. Programme for development of Animal Husbandry from the Second Plan upto the end of Annual Plan - 1969 involved an outlay of Rs.11.689 lakhs. This expenditure was incurred on

setting up 8 Key Village Units, 1 (one) Veterinary hospital, one dispensary and 12 outposts. Improved varieties of poultry and pigs were distributed to the local population with a view to improving the local breed in due course.

The Fourth Plan originally involved an outlay of Rs.18.730 lakhs on Animal Husbandry including dairying and milk supply. The schemes had touched only the fringe of the problem owing to lack of a properly developed infrastructure. However, after upgradation of the Livestock Department into the Directorate of Animal Husbandry, the position was reviewed and fresh schemes have been chalked out with a view to setting up the basic frame-work. This has resulted in an increase in the outlay from Rs.18.730 lakhs to Rs.37.243 lakhs in the Fourth Plan. It is expected that by the end of the Fourth Plan, the basic pre-requisites will have been completed, and concrete development programmes can be effectively implemented in the Fifth Plan.

#### Forests:

Forests are the main source of this Territory's revenue. Padauk, Gurjan, Papita, Chuglam, White Dhup, Badam, **Pyirna**, etc., constitute the major forest produce of this Territory. The schemes undertaken by the Forest Deptt. under Plan related to replacement and strengthening of the outlived and outmoded equipment for improvement of extraction and logging techniques, creation of teak, matchwood, cane and bamboo plantations, organisation of research work on silvicultural programmes, establishment of a boat building

yard for construction of boats, revision of the forests working plan etc. At the end of the Second Plan, the position of various plantations was as follows:-

Matchwood (Addl. area) (hect)		336
Cane	" "	49
Teak	" "	610
Bamboo	" "	"
Padauk	" "	-

At the beginning of the Fourth Plan, this had increased to 442 hectares, 243 hectares, 3478 hectares, 121 hectares and 81 hectares respectively. The Fourth Plan originally envisaged an outlay of Rs.67.400 lakhs under Forests. It has now been assessed that the requirements under Forests during the Fourth Plan will exceed the outlay by Rs.6.679 lakhs. It has also been proposed to intensify extraction of timber from hitherto unexploited areas. The out-turn of timber, which stood at 54,637 tonnes in 1956-57, has increased to 67457 tonnes (or 95520 CM) in 1971-72.

#### Water Supply.

Upto the end of Annual Plan 1968-69, an amount of Rs.55.900 lakhs was spent on water supply to implement water supply schemes in 176 villages. 319 ring wells were constructed and piped water supply was available to a population of about 37000. During the Fourth Plan, an amount of Rs.253.863 lakhs was set apart for water supply, of which the major portion was to be spent on Dhanikhari Water Supply Project. This project is a joint venture by the Defence and Civil establishment



involving a total cost of Rs.2.64 lakhs, of which two-thirds are to be borne by the civil side. This project, when completed in 1973, will generate 15 lakh gallons of water per day, of which 10 lakh gallons will be used by the civilian population and the rest by the Defence establishment.

Welfare of Backward Classes.

Besides the general development programmes in the areas inhabited by the scheduled tribes, additional programmes were envisaged under Plan for the welfare of the tribal people. This related to extension of concessional educational facilities, establishment of model plantations, supply of housing materials at subsidised rates and schemes for encouraging sports and games. In the Fourth Plan an additional scheme to give opportunities to the tribal people to see the rest of the country and get acquainted with the development programmes going on elsewhere has been included from 1972-73 onwards.

One important scheme being implemented in the Fourth Plan under this sector relates to re-settlement of 50 families from Car Nicobar at Little Andaman, owing to pressure of population in Car Nicobar. This scheme envisages allotment of land to the families at Little Andaman at the rate of 10 acres per family and extension of other facilities for settlement there.

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By the end of the Fourth Plan, an amount of Rs.8.728 lakhs will have been spent under this scheme. It has been possible to bring the Nicobarese, Andamanese, Shompens and Onges into closer communion with other people. The Nicobarese have already taken to a settled way of life and efforts to persuade Onges and Shompens to adopt a settled way of life are continuing. The Andamanese, who are only 24 in number now, have been settled at Strait Island, which has been declared as a Tribal Area.

Many difficulties were experienced in the implementation of tribal welfare programmes owing to the difficult conditions prevailing in the tribal area. In dealing with problems in the tribal area, a specialised psychological approach was necessary to convince them of the utility of modern practices and methods and this naturally took time. However, the conditions have improved considerably now with the result that by the end of the Fourth Plan, an essential socio-economic frame work will have been established for more ambitious programmes in the Fifth Plan.

#### Fisheries.

The waters around these Islands abound in valuable fishery resources. But in the absence of any scientific survey and reliable data, it has not been possible to scientifically exploit these resources fully. Programmes under 'Fisheries' have been mainly confined to settling of professional fishermen here from the maritime states on the mainland and to supplying all essential fishery requisities at subsidised rates. The Fourth Plan envisages an expenditure

of Rs.5.908 lakhs under Fisheries. The fish catch which stood at 44 M.T. per annum at the beginning of the first plan has now increased 570 M.T. per annum during 1971-72. Compared to the requirement of the population which stand at 4200 M.T. per annum, this is hardly sufficient. The Ministry of Food and Agriculture have set up an Offshore Fishing Station for the purpose of conducting survey of offshore fishing grounds. Absence of reliable data has acted as a bottleneck in embarking upon ambitious projects to exploit the fishery potential.

Power.

When the First Five Year Plan started the installed capacity was 1100 K.W. This has increased to 3053 K.W. at present and is expected to increase further upto 4223 K.W. by the end of the Fourth Plan. During the period 1955-56 to 1973-74, the outlay on 'Power' will come to Rs.111.052 lakhs. 34 villages have been electrified already and this number is likely to increase to 40 by the end of the Fourth Plan.

Industries.

Owing to the immense forest wealth available in this Territory, wood-based industry has great scope for development here. But lack of adequate supply of water and power acted as a deterrent to the growth of industries on a large scale here. No industrial policy has also been evolved so far for these Islands. However, this is in the process of finalisation in consultation with the Govt. of India, Ministry of Home Affairs. Programmes under 'Industries' under Plan so

far related mainly to establishment of various training-cum-production centres in blacksmithy, carpentry, tinsmithy, cane and bamboo work, coir work etc. Supply of improved tools and equipments at subsidised rates was also envisaged in the various plans. Till the beginning of the Fourth Plan, an amount of Rs.31,065 lakhs was spent under this sector. Outlay in the Fourth Plan for 'Industries' was Rs.3.782 lakhs.

Co-operation:

When the Second Plan started, we had 43 Cooperatives here. The number has increased now to 207. We also have among them, marketing societies, primary credit societies, wholesale stores, plantation and farming societies, timber extraction societies, fisheries cooperative societies etc. A State Co-operative Bank has also been established to cater to the credit needs of the co-operative sector. The Fourth Plan expenditure on Co-operation is expected to be Rs.22.047 lakhs.

The development of the cooperative movement in this Territory has been very slow. Lack of public cooperation and public leadership has caused the ruin of many a society. Undue dependence on the department for managerial personnel has also acted as a tremendous strain on the department and the cooperative movement as well.

Tourism:

Planned development of these islands for tapping tourist potential started only with the Third Five Year Plan. A provision of Rs.3.00 lakhs was made under 'Tourism' in this plan mainly for the implementation of two schemes - 'Development of Tourist Spots'

and 'Construction of a Tourist Home'. The Tourist Home at Haddo was constructed under this scheme. Expenditure during the Third Plan period was Rs.3.46 lakhs against the outlay of Rs.3.00 lakhs.

Two schemes (1) Construction of a Tourist Lodge for low and middle income group tourists and (2) Development of picnic spots, were included in the Fourth Five Year Plan under sector 'Tourism'. A dormitory type building to accommodate 20 persons has been completed during this Plan period. Programme to construct a swimming pool had to be dropped owing to the high cost involved. Procurement of a nine seater mini-bus and a small motor launch is envisaged for 1972-73 and 1973-74 respectively.

#### Housing.

The Second Plan started with seven schemes under 'Housing' which included construction of staff quarters, office buildings for Govt. staff in Colonisation areas, residential accommodation for Government employees at Port Blair, Housing scheme for sweepers, Low Income Group Housing Scheme, Village Housing Scheme etc. Many of the schemes were carried over to the next plan and during the Third only three schemes were in operation namely-

(1) Low Income Group Housing Scheme, (2) Village Housing Scheme and (3) Construction of residential accommodation for industrial labourers. Rs.2.00 lakhs is the outlay under the Fourth Plan for the Low Income Group Housing Scheme and Rs.12.859 lakhs for construction of residential accommodation of industrial labourers. There is a nominal outlay of Rs.10,000 for Village

Housing Scheme. The various schemes implemented till the beginning of the Fourth Plan involved an outlay of Rs.27.341 lakhs.

The schemes under Housing however have not touched even the fringe of the problem. No concerted effort was made to develop house sites for construction of new houses nor was any large scale scheme implemented for providing houses to the economically weaker sections of the community. The schemes in the Fifth Five Year Plan will have to take into account this prime necessity.

Miscellaneous.

Lack of publicity about these islands on the mainland and lack of publicity within the islands of the activities going on in the mainland and in this Territory have been among the main factors that have adversely affected developmental activities of this Territory in general. The communication facilities being extremely difficult, special schemes were evolved to set up Information Centres at various islands to acquaint the people of the areas with what was going on in the outside world. Other schemes included purchase of Community Listening Sets, establishment of Library, publishing of magazines etc. The schemes were quite modest and even the implementation of these modest schemes was handicapped owing to absence of a properly organised publicity department. A total amount of Rs.8.256 lakhs will be spent during the Fourth Five Year Plan under Information and Publicity.

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The Statistical Bureau existing to-day is hardly sufficient to cope with the needs of the growing economy. The various data collected by the Bureau are hardly sufficient even to evolve a proper planning strategy. The present Bureau is headed by a Statistical Officer of the Class II Grade. A sub-unit of this Bureau is to be opened in Car Nicobar during the Fourth Plan. A fully organised Statistical Department will have to be established during the Fifth Plan.

Community Development.

The whole of Andaman and Nicobar Islands are covered by five Community Development Blocks, of these, two Blocks namely Car Nicobar and South Andaman Blocks have now entered post stage II. The Blocks are carrying out the development programme as per the schematic pattern envisaged in the C.D. Manual.

However, it may be mentioned that the Community Development Blocks have not been fully used as an extension agency for carrying out developmental activities of the various departments. The difficulty is to be removed by evolving a proper strategy in the Fifth Plan.

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CHAPTER IV

STRATEGY OF DEVELOPMENT AND RESOURCE MOBILISATION IN  
THE FIFTH PLAN

As already indicated briefly in the earlier chapters the strategy of development in the Fifth Plan will be more or less on the lines followed in the previous plans. Putting in the "Critical minimum effort" and to give "big push" to the economy of these islands will be the basic consideration in the Fifth Five Year Plan.

The strategy of development in the Fifth Five Year Plan has the following objectives in view:-

- (1) To complete development of the infrastructure of the economy.
- (2) To bring about specialisation and diversification in sectors like Agriculture, Animal Husbandry, Industries, Fisheries, Tourism etc. with a view to obtaining optimum returns from investment and also to promoting balanced sectoral growth of the economy.
- ~~(3)~~ (3) To increase the employment potential in all the sectors with a view to absorbing the educated unemployed whose number is on the increase with the growth in the Education Sector.
- (4) To provide a potential reserve of technically qualified candidates to cope with the increasing requirements of technical man-power.
- (5) To encourage and expand the role of private enterprise in the development of the economy of these islands and also to develop a sense of participation of the community in general in developmental programmes. It is also



the intention to develop a closer communion between the island and mainland so that the economy of these islands will develop as an integral part of the nation's economy.

- (6) To ameliorate the lot of the weaker sections of the community viz. the Schedule Tribes.

The pattern of priorities of investment has been chalked out with these specific objectives in view. Unlike in the previous plans, the highest priority goes to Agricultural Programmes and 'Transport and Communication', followed by 'Social Services'. A significant departure from the previous pattern consists in the increased emphasis on development of industries and sectors like Power, Forests etc. which are basic to the development of industries. Schemes for ameliorating the lot of weaker sections of the societies viz. the Scheduled tribes population of these islands have been given added importance in the Fifth Plan. Another significant landmark of the Fifth Plan programmes will be the development of Tourism in these islands and the expansion of the publicity sector. Altogether new schemes particularly under sector housing etc. are proposed to be taken up to give a wide berth to the chronic problems of housing shortage, slums etc. This will also prove to be a boon to the people of the low and middle income group.

Industries and Tourism which has occupied a very insignificant position in the previous plans will emerge two of the most important fields of activity in the Fifth Plan. Apart from encouraging all possible kinds of wood-based

industries, schemes will also be chalked out to tap fully the potential for development of handicrafts and cottage industries. Acceptance of the proposals and policies under Tourism is bound to make these islands the hottest tourist spot in the whole of India.

Absence of an adequately equipped organisation to provide basic data relating to the various aspects of the economy has been one of the factors that had stood in the way of evolving proper policies and programmes so far.

Establishment of a full-fledged Statistical Bureau in the Fifth Plan will solve this problem.

With the added dimensions in planned development of these islands in the Fifth Plan, it is absolutely essential to evolve a suitable administrative machinery to tackle the problems efficiently. Establishment of a full-fledged specialised Planning Unit will be a significant development in the Fifth Plan. With the help of the specialised man-power planning cell which will be established as a necessary adjunct to the Planning Unit, it should be possible to have programmes and policies in the proper perspective to make the Fifth Plan programmes, rational, viable and effective.

#### Resource Mobilisation.

The Andaman and Nicobar Islands are a Union Territory without legislature. The receipts and expenditure of this Territory form part of the receipts and expenditure of the Government of India. Its budget requirements are included in the demand for grants of the Ministry of Home Affairs.

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The major sources of revenue of this Territory are Forests, Shipping, Bus Transport and Electricity. To increase the revenue resources, this Administration has proposed a number of measures. The most important ones among them are mentioned below:-

- (i) Increase in the extraction of timber from 90,000 cum. to 3,65,000 cum per annum by reorganising and intensifying management. This scheme is expected to yield a net additional revenue of Rs.0.83 to 1.00 crore per annum.
- (ii) Imposition of a levy on hunting and shooting of deer and wild boars in the forest areas, yielding an additional revenue of Rs.1 lakh annually.
- (iii) Proposal to export timber which is likely to yield foreign exchange equivalent to Rs.15.00 crores annually.
- (iv) Raising cash crops such as Red Oil Palm, Rubber and Cashew which on maturity would yield additional revenue to the extent of Rs.6.20 crores annually.
- (v) Increase in passage fares of all classes in ships for mainland-Island voyages. This is pending clearance by Home Minister's Advisory Committee.
- (vi) Reduction in the concessions granted to students for travel by buses. This matter is also pending clearance by the Home Minister's Advisory Committee.
- (vii) Upward revision of the tariff structure of the Electricity Department. The proposal is under consideration of the Government of India.

The Administration has also written to other Union Territories and States seeking information on the rates of taxes and duties prevailing there. On receipt of information from them the position will be reviewed to find out if there is any scope for increasing the existing rates of duties and taxes or introducing new taxes in this Territory.

Part II gives in brief the approach and the outline of the programmes envisaged under each sector during the Fifth Plan.

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AGRICULTURE, MINOR IRRIGATION AND SOIL CONSERVATION

I. Agricultural Production.

That the development of the primary sector is basic to the development of the economy as a whole needs no elucidation. The importance attached to the development of agriculture in the development of Indian Economy has been evident in the approach to planned development in India. In the development plans of this territory also considerable importance was given to the development of agricultural programmes. The schemes and programmes implemented in the agricultural sector in the past have paved the way for specialisation and diversification of agricultural pursuits in the Fifth Plan. In the previous plans, maximum emphasis was given to the production of food-grains. The trials and experiments carried out in the past have convincingly proved that the hilly and undulating terrain of these islands is pre-eminently suited for the cultivation of spices. However, cultivation of food crops cannot be set at naught.

This territory has always been experiencing considerable shortage of vegetables and fruits. Lack of adequate transport and communication facilities has worsened the situation. Plantation crops have also not developed to the optimum level even in areas most suited for plantations.

The farmers of this territory have been averse to the use of modern methods of cultivation and use of inputs. The lands being virgin, until recently, they did not even feel the need to make extensive use of fertilisers and manures. Lack of adequately trained personnel at

[the extension level has also had a dampening effect on programmes for increasing agricultural productivity.

The population of these Islands was about 34,000 during 1951 and it increased 105% in a decade bringing the population to 64,000 in 1961. The census of 1971 has recorded the population at 1,15,000 and if 5 percent increase is calculated, the projected population by the end of the Fourth Plan i.e. 1973-74 would be about 1,33,000. The population by the end of the Fifth Plan will require 45,800 tonnes of cereals at an average rate of 213 KGs per capita per annum. It is also estimated that 20% of the population will depend on wheat and the remaining 80% population will depend only on the main staple food - rice. Wheat cannot be grown here owing to agro-climatic conditions. Therefore, this Administration must take up the responsibilities of growing 37,000 tonnes of rice by the end of the Fifth Plan i.e. 1978-79.

Besides rice, these Islands would also require other essential items by the end of the Fifth Plan as follows:-

- (i) Pulses - 3,400 tonnes @ 17 kg./capita/annum
- (ii) Edible oil- 2,100 tonnes @ 10 kg./capita/annum
- (iii) Potatoes - 2,100 tonnes @ 10 kg./capita/annum
- (iv) Onions - 1,300 tonnes @ 6 kg./capita/annum
- (v) Sugar - 7,000 tonnes @ 33 kg./capita/annum
- (vi) Vegetables- 9,000 tonnes @ 40 kg./capita/annum

Moreover, this population will require root crops, fruits, spices etc. for their own consumption and also for exporting to mainland to stabilise their economy.

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Approach to the Fifth Plan:

The approach to the Fifth Plan under 'Agriculture' has been made after giving due consideration to these aspects. It may not be economically sound to aim at self-sufficiency in all the fields of agricultural production. The basic strategy, as indicated earlier, will be to diversify the pursuits with a view to ensuring optimum returns from the investment.

Out of the total geographical area of 8,29,275 hect., an area of 42,596 hect. have so far been released for other than forest purposes. So far 9,260 hect. of flat land and 7,945 hect. of hilly land have been allotted for cultivation and it is expected that by the end of the Fifth Plan period the area under cultivation in the flat and hilly land will be about 20,000 hect. and 15,000 hect. respectively.

The Fifth Plan envisages bringing 16,500 hect. under paddy, of which 4,200 hect. i.e. about 25 percent will be brought under double-cropping with the help of assured irrigation facilities being provided in the scheme. The High Yielding Varieties of paddy will be used to bridge the gap of deficiency in production. This Plan will bring 11,500 hect. under High Yielding Varieties of paddy, i.e. 70 percent of the paddy land will be covered under High Yielding Varieties. Schemes have been included with adequate provision to supply fertilizers within the reach and means of the cultivators. The average yield which was 1.3 tonnes of rice per hect. in the past has now increased to 1.55 tonnes per hect.

and this will be further increased to an average of 2 tonnes of rice per hect. by the end of the Fifth Plan period.

These Islands receive on an average 313-315 centimetres of rainfall annually. There are 2 monsoons. This would help us grow jute, double-crop of paddy and rabi crops like pulses, oil seeds, vegetables etc. The erratic nature of rainfall sometime causes set back in production. The irrigation facilities provided in the scheme will help the cultivators to overcome the risk of growing different crops. The climatic condition is quite favourable for raising pulses oil seeds and vegetables as rabi crops. In this Plan, adequate provision has been kept for growing all these to meet the needs of the growing population.

About 77 percent of the total geographical area is occupied by virgin forests. The undulating topography can conveniently be brought under different crops, especially plantations like coconut, arecanut, cocoa, coffee, different fruits like mango, sapota, jack, citrus etc. and also spices. This topography will also provide enough scope to grow pineapple, papaya, banana, sugarcane, castor etc. This Administration has so far allotted 7,350 hec. of hilly land and is expected to allot another 2,500 hec. within the Fourth Plan period. It is also expected that about 3,500 hec. of hilly land will be brought under cultivation within proper soil conservation measures during the Fifth Plan which will cover about 13,350 to 13,500 hec. of hilly land in all under different crops by the end of 1978-79.



As a result of bringing so much area under different fruits and plantation crops, there will be marketable surplus of fruits and root crops, which will have to be processed locally. The processed products will be sold either in the local or the mainland markets. This scheme will provide enough scope to handle sufficient quantities of different fruits for processing in the Fruit Preservation Unit set up during the Fourth Plan. The Unit will be so expanded as to ~~be~~ meet the increased demand. The fruit Preservation Unit will also impart training to people in fruit preservation and canning.

A Marketing Cell will be organised under this department to regulate marketing of the surplus produce.

The increase in population will bring in the demand for more employment during the Fifth Plan period. A fraction of the population can be employed under the public sector, but bulk of them will have to be diverted to agriculture. In view of this, programmes under agriculture aim at imparting training to the local unemployed young farmers in agriculture. An Agricultural Training Institute will be established for this purpose during the Fifth Plan period.

The extension services of this department at present are not at all adequate to impart scientific know-how to all the cultivators. It is, therefore, proposed to include a scheme envisaging establishment of an Agricultural Information and Publicity Unit during this Plan period. This Unit will give adequate publicity to modern methods of cultivation, use of inputs etc. and will act as an agency to bring forth the various problems of the cultivators

and suggest solutions. It will also broadcast scientific information to the cultivators to help them in relation to the crops being grown during the season and will publish and issue brochures, leaflets and pamphlets etc. and will also give publicity through audio-visual aids.

Broad outline of the schemes to be undertaken during the Fifth Plan.

The following are the salient features of the Agricultural Production Programmes during the Fifth Five Year Plan period:-

- (1) Intensification of area under high yielding varieties.
- (2) Extension of area under different crops.
- (3) Utilisation of hilly lands for various crops/plantations as per capability.
- (4) Multiple-cropping practices.
- (5) Adoption of package of practices.
- (6) Soil Testing, Soil amendment and balanced application of fertilizers and protection of plants from pests and diseases.
- (7) Providing irrigation and drainage facilities.
- (8) Preparation of land capability map for soil conservation, land reclamation and land shaping.
- (9) Mechanisation of agricultural operations, especially land shaping and summer ploughing by bull-dozers and tractors.
- (10) Strengthening of the supply line by adequate transport facilities and establishment of store godowns within a radius of 5 K.M of the cultivators.
- (11) Establishment of Research Centres for studying soil fertility, maintenance of fertility status, introduction of field and plantation crops etc.
- (12) Introduction of new crops and selection of right varieties for the right soil zone.

- (13) Providing scientific training facilities of both short and medium duration to cultivators, young farmers and in-service staff to keep pace with modern methods of cultivation.
- (14) Construction of threshing floors and supply of tarpaulines and various agricultural inputs at subsidised rates.
- (15) Adequate loan facilities to the cultivators.
- (16) Strengthening of the administrative set up for achieving the objectives.
- (17) Marketing of various agricultural produce in and outside this Territory.
- (18) Dissemination of current scientific information to the cultivators.

It is proposed to implement 22 different schemes under "Agricultural Production" in the Fifth Five Year Plan on the above lines at a cost of about Rs.400 lakhs. It is hoped that the implementation of these schemes may create a propitious climate for self sustained agricultural development in these Islands. Adequate provisions will also be made within this outlay for strengthening the administrative machinery to effectively deal with the increased volume of work in hand.

## II. Minor Irrigation.

The success of intensive agricultural production mostly depends on assured irrigation facilities. These islands receive on an average 313-315 cm of rain from both the monsoons, but its uneven distribution and uncertainty do not allow cultivators to take up multiple cropping. Multiple cropping in these islands is possible with assured irrigation, but so far agriculture in these islands has been under rainfed condition. Owing to erratic nature of rainfall,

long spells of intermittent droughts are common every year. This discourages the cultivators from intensifying cropping pattern and also large scale utilization of fertilisers. The importance of irrigation was not duly emphasised during the past years. Tentative survey reveals that these islands provide enough scope to take up minor irrigation in tapping all possible water sources by providing wells, small tanks, and dams across seasonal streams.

Drainage plays an active role in the development of agriculture. Many valleys get inundated during the monsoons. It is possible to drain out water and put the areas to successful cultivation.

With these in view, the Fifth Plan envisages taking up minor irrigation and drainage schemes under the Agricultural Department. A Minor Irrigation Cell will be established which will draw up schemes to bring 1,000 hect. of land under irrigation and 1,000 hect. of land under drainage.

The cultivators of these islands are economically deprived and backward in nature. It is not possible for them to take up minor irrigation or drainage if considerable incentives are not provided from the Government. Therefore, this scheme provides 75 percent subsidy on the total cost of each minor irrigation and drainage scheme.

The outlay involved in implementing the schemes on minor irrigation and drainage is about Rs.50 lakhs.

### III. Soil Conservation.

The topography of these islands is characterised by low ranges of hills enclosing narrow valleys, and rimmed by narrow coastal stretches. More precisely, the topography in some islands is largely flat to gently undulating and in some islands from steep ridges to valleys of varying width with more or less perennial streams and nullahs.

Construction of soil plays an important role in development of agriculture on a sustained basis. With this in view, a pilot soil conservation survey was conducted in Middle Andaman during 1959-60, in an area of about 5,000 hec. The survey revealed that about 51% of the area surveyed falls under steep to very steep slope, about 30% under moderately level to sloping, and 6% level land. The maximum intensity of rainfall recorded was 60.2 m.m/hr. The extent of erosion recorded was that on about 77% of the land moderate to severe erosion and 14% of the area was under gullies. The survey has proved that the soil of these islands are highly susceptible to erosion. The 128th Estimate Committee of the 4th Lok Sabha recommended that any forest clearance should immediately be protected by adequate soil conservation measures and lands already cleared should be brought under soil conservation measures immediately.

Practically no soil conservation work was done during the first, second and third Five Year Plan period. During the Fourth Five Year Plan, soil conservation schemes envisage

covering about 600 hecets. of paddy/hilly land already allotted to cultivators under soil conservation measures. It is anticipated that about 20,000 hecets. of flat land and 15,000 hecets. hilly land will come under cultivation by the end of Fifth Plan.

Considering the gravity of the situation it has been proposed to cover atleast 5,000 hecets. of land under soil conservation measures during the Fifth Plan period. Soil conservation measures will not only check soil erosion, but will also increase the total area under paddy and other crops, according to the land's capability.

In Andamans there are about 230 sq. miles of mangrove forest belts of varying width. These forests are subject to inundation by the tidal flows. They contain very rich soil. These are affected by salinity. The Agricultural department conducted a reconnaissance survey and found that the mangrove forests have been clear-felled in about 2,000 hecets. of land in South, Middle and North Andamans. The cultivators are eager to reclaim these lands for purposes of cultivation but the cost involved is prohibitively high. This Administration intends giving all help in reclaiming such saline lands. A scheme has been included to reclaim 500 to 1,000 hect. in the first instance during the plan period.

The total outlay involved in these schemes will be about Rs.200 lakhs.

ANIMAL HUSBANDRY

Livestock development is vital to the economy of these Islands. In any large scale development of animal husbandry programme in the territory, technical problems of various nature and practical problems of cattle breeders peculiar to the territory are bound to crop up and rapid advancement is possible only through solution of these problems in the local farms by local scientific personnel rather than having full reliance on the mainland for men and materials. The approach towards the Fifth Five Year Plan has been drawn up in this perspective. During the Second Five Year Plan only four schemes such as Key Village Scheme, Animal Nutrition Scheme, Expansion and Improvement of Veterinary Services and Poultry Farming Schemes were taken up for implementation. 6 Key Village Units, 1 Artificial insemination Centre, 1 Grass Farm, 1 Veterinary Dispensary, 4 Veterinary Out Posts and 1 Small Poultry Farm were established. The outlay was Rs.3.800 lakhs and the expenditure incurred was Rs.0.907 lakhs. During the Third Five Year Plan 7 schemes namely expansion and improvement of Veterinary Services, Expansion of existing poultry farm, Training of Poultry Keepers, Cattle breeding, Development of Poultry Farming in settlement areas, Establishment of Composite Livestock Farm at Port Blair and purchase of dairy cattle were included for implementation. The last three schemes could not be implemented for want of funds and a cattle carrier. Despite these bottlenecks, against the provision of Rs.4.420 lakhs the expenditure incurred was Rs.6.927 lakhs.

During the first annual plan ten schemes namely establishment of Composite Livestock Farm, Expansion and Improvement of Veterinary services, Pig breeding-cum-Extension Farm at Car Nicobar, Expansion and Improvement of existing Poultry Farm, Expansion of the Key Village block in middle and North Andaman, Training of Poultry Keepers, loan to Poultry Keepers, Training of personnel of the department on mainland, strengthening of the Livestock department and supply of milch cattle were included for implementation. Out of these schemes very few could be implemented owing to difficulties in transportation, construction of buildings etc. The total expenditure incurred was Rs.0.479 lakh, outlay was Rs.5.813 lakhs. During the Second and Third Annual Plans 7 schemes were taken up for implementation, such as expansion and improvement of Veterinary Services, expansion of existing Key Village block and establishment of an additional Key Village block, Pig breeding, Financial assistance to Poultry Keepers, Training of personnels of the Livestock Department, strengthening of Livestock Department and supply of milch cattle. Four Veterinary Out Posts, two Key Village Units established, ten Bulls were purchased, 499 hatching eggs were purchased, two Veterinary Compounder and 2 Stockman were trained on mainland institute. Eight Poultry Keepers were given assistance for purchase of Poultry birds eggs, housing materials etc., One Higher Grade Clerk, 2 Lower Grade Clerks, 1 Draftry were appointed. Milch Cattle could not be imported for want of cattle carrier. The outlay including building was Rs.7.954 lakhs and the expenditure incurred



lakh  
was Rs. 0.705/excluding building. During the Fourth Five Year Plan 8 schemes were taken up for implementation namely, expansion and improvement of Veterinary services, cattle development, training of personnel of the Livestock Department, goat breeding, Development of Poultry Farming, strengthening of the Livestock Department, goat breeding and supply of milch cattle. The achievement upto June, 1972 was one Veterinary outpost converted into Veterinary dispensary 2 veterinary outpost established, 14 bulls were purchased 23 half or three fourth bred bulls were purchased and distributed free of cost to farmers for breeding and the farmers were paid premium @ Rs. 30/- per month for maintenance of bulls, one piggery demonstration unit established at Car Nicobar, 200 Exotic Cocks, 1120 Poultry Birds (93 units), 4800 hatching eggs were purchased and distributed to Poultry Keepers at concessional rates. The Director of Animal Husbandry came in position in December, 1971, 174 goats were purchased and distributed to farmers at concessional rates, 16 milch cattle were purchased and distributed to needy and deserving persons. The total outlay is Rs. 15.730 lakhs and expenditure incurred upto June, 1972 is Rs. 1.924 lakhs excluding buildings. The schemes were not adequate to cater to the needs of the population of these Islands. The schemes attempted at did not meet with much success.

#### Approach to the Fifth Five Year Plan.

The human population of the Island according to 1971 census is 1,15,090. The minimum nutritive requirement for this population would be as follows:-

Milk at the rate of 284 Ml. per head per day comes to 32685.5 litre per day.

Egg at the rate of one egg per head per day comes to 115090 per day

Mutton at the rate of 50 gm. per head per day comes to 5754.5 kg. per day.

The Livestock population of these islands according to 1971 census is as follows:-

Milch cattle and Buffaloes	-	4383
Poultry	-	157245
Goats	-	11602

Taking into consideration their productive capacity, production is as follows:-

Milk	-	3574.7 lit. per day
Eggs	-	4847 per day
Mutton	-	398 kg. per day

Projecting the human population at the end of the Fifth Five Year Plan as 146690 the nutritive requirement as above for this population would be of the order of

Milk	-	44300 lit. per day
Eggs	-	156690 egg per day
Mutton	-	7834.5 kg. per day

The projected Livestock population by the end of Fifth Five Year Plan would be as follows:-

Cattle and Buffaloes	-	7515
Poultry	-	250982
Goats	-	13885

Taking into consideration the productive capacity, production would be of the order of:-

Milk	-	5847 lit. per day
Eggs	-	7736 eggs per day
Mutton	-	0477 kg. per day

A comparison of the available figures as indicated in the previous paragraph reveals a very wide gap between the supply and demand. If nothing is done to rectify the situation the gap will necessarily widen at the end of the Fifth Five Year Plan period. The closing of this gap, which has been the result of utter neglect in the last so many years, in the short period of five years of the Fifth Five Year Plan, will be impossible. Whatever is attempted at in the Fifth Five Year Plan will be necessarily be preliminary in an attempt to provide infrastructure departmentally and extra departmentally on which to base more ambitious animal production programme in the future plan period. What is proposed to be attempted at in the Fifth Five Year Plan in this Territory had been by and large completed in the pre-plan and perhaps in the first two Five Year Plan periods, in the rest of the country.

#### Cattle Development.

Cattle Development is an important field for animal production in this Territory. To meet the demand for milk, there are two possibilities, one possibility is that comparatively large number of animals will have to be inducted in this Territory and distributed amongst deserving farmers and cultivators. Another possibility is that the Government itself could start composite Livestock breeding farms of which cattle and buffaloes will be the major items, multiply the stock in the farms and distribute male and female

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seed materials on suitable terms and conditions for multiplication and production in the field. Either of the two possibilities mentioned above perse will not be sufficient. What must be attempted should be judicious mixture of both the alternatives. Accordingly, taurin ande bubalin, cattle both male and female of a suitable breed preferably Sindhi and Cross breeds (with predominantly Jersey blood in them) and of Murrah breed should be introduced in this Territory to serve as foundation stock at the proposed Government Livestock Farm and to be distributed to suitable farmers and cultivators on suitable terms and conditions.

Further one big composite Livestock farm should be set up by the department in South Andaman somewhere in a suitable place near Port Blair and three smaller Composite Livestock farm in middle, North Andaman and at Great Nicobar. The existing Key Village Blocks in South Andaman should be properly strengthened and streamlined and new Key Village Blocks be established at Little Andaman and Great Nicobar. Sufficient number of breeding bulls should be located as stud with the progressive cultivators outside the Key Village Block under proper terms and conditions. Some amount should be provided for giving loan to interested cultivators for purchase of draught bullock and cows to be selected from among the better quality of animals available locally. The present shipping capacity for transporting animals from the mainland to Port Blair and between the islands is woefully inadequate and a considerable enlargement of this capacity would be necessary during the next few years.

Outlay for this programme will be approximately  
Rs.10 lakhs.

Feed and Fodder.

An important adjunct to any cattle production programme will be the development of feed and fodder resources. An appraisals of the feed resources in this territory would indicate that the concentrate cattle feed like wheat, bajra, corn, oil cakes, pulses, cotton seeds, molasses etc., would have to be continued to be imported from the mainland, since local production of these will perhaps be uneconomical. The Government may continue to import concentrate feed from the mainland and after having processing them in the feed mixing plant to be established at the proposed Composite Livestock farm and Poultry Farm distribute the readymade feed to the interested persons on subsidised rates initially and on a no profit no loss basis later on.

Regarding development of fodder resources it is felt that a fodder demonstration-cum-distribution centre be established as an adjunct to the proposed composite Livestock farm and in this centre trials for growing nutritious leguminous fodder like alfa alfa, berseem, cow pea, clovers etc., and Napier, Sudan grass and fodder maize may be grown and roots, cuttings, seedlings etc., be distributed to cultivators for growing in their field for consumption of their own cattle. Suitable facilities for training of farmers sons in this institution in fodder

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cultivation should be provided so that after successful completion of the training they will go back to their land and help in the cultivation of fodder. Suitable incentive subsidy should be given to such of the farmers as set apart about 10% of their holding for fodder cultivations. It is necessary that a post of agrostologist of a suitable status is provided for with suitable ancillary staff at the headquarters in order to implement, supervise and co-ordinate all fodder and grass land development projects in this territory.

It is necessary to set apart common grazing areas in the villages and to rationalise of Forest grazing as in other state.

Outlay for this programme will be approximately Rs.5 lakhs.

#### Poultry Production Programme.

Poultry, if properly managed would be the best answer for the quick production of animal protein in this Territory. A modern poultry farm should be set up in the South Andaman, where facilities for incubation, brooding, slaughtering operation, dressing and proper storage of meat and eggs would be available. A suitable feed processing mixing plant should also be established at the farm. The laying capacity of this farm at the end of the Fifth Five Year Plan should be around 5000 layers.

Similarly smaller farms should be set up whose laying capacity will be around 1000 at the end of the Fifth Five Year Plan

at the following places, Middle Andaman, North Andaman and Car Nicobar. All these farms will not be commercial poultry farms. These farms should run as economically as possible and produce seed materials to be used in extension work. Eggs for hatching, day old chicks, breeding cocks and chickens of various age group will be sold/distributed at subsidised rates from these farms to the villagers for rearing and multiplying. Brooding and rearing equipments will be loaned to the farms who will be given day old chicks for rearing. Custom hatching will also be done on nominal charges. Balanced poultry feed will be distributed from the poultry farm at Port Blair on subsidised rates initially and on no profit no loss basis later on.

Till the establishment of these farms, extension activities undertaken at present by the department may continue, getting stock from mainland.

Outlay for this programme will be approximately Rs.10 lakhs.

#### Pig breeding

Pig breeding is another method which ensures quick production of animal protein and hence a suitable breed of pigs be raised for distribution to the interested people from the Composite Livestock Farms, middle white yorkshire, or berkshire, will probably be the breed of choice to be introduced in this territory. Importance should be given for the propagation and popularisation of pigs in the predominant tribal areas and in the urban areas. A change in the food habit

will have to be initiated, so that the age old anathema to consumption of pork, becon and other pig product is overcome.

Outlay for this programme will be approximately Rs.10.00 lakhs.

#### Sheep and Goats.

This area being a heavy monsoon area with an average annual precipitation of 318 cm. may not be suitable one for rearing sheep for wool production point of view, but sheep husbandry from Mutton production point of view may be attempted. Accordingly, a small herd of mutton type of sheep preferably the mandya or the bellary type of sheep may be raised in the proposed composite Livestock farm to be set up in South Andaman.

On previous occasions, Black Bengal, Barbari, Jumnapari Nellore breed of goats were introduced in this territory. Black Bengal seem to have thrived best. A small sheep and goat breeding farm should be set up in which 2 herds of goats of the Black Bengal and Nellore variety and 50 sheeps of Mandya or some other suitable breed may be reared for subsequent distribution of progeny to the interested cultivators.

Outlay for this programme will be approximately Rs.10.00 lakhs.

#### Animal Health Cover.

The programmes implemented so far to provide the Veterinary cover have been quite satisfactory. However a suitably phased programme be undertaken to provide more minor Veterinary Dispensaries.

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convert minor Veterinary Dispensary into Veterinary Dispensary, Veterinary Dispensary into Hospitals. A suitably equipped disease investigation section with a disease investigation laboratory should also be set up. Outlay for this programme will be approximately Rs.15 lakhs.

This territory has fortunately been free from many contagious diseases to which species of domesticated animals and zoonosis to which man is susceptible. Suitable quarantine and other measures be taken up so that this situation continues by design.

A phased programme by training of suitably qualified local boys in the mainland leading to the degree of Veterinary Science, training of local boys as Veterinary Compounder and Veterinary Stoc. be conducted at Port Blair, also in-service training of serving officers in subject matter specialities may also be undertaken. The pay scales and status of technical officers of all categories of this department which has a very important task assigned to it have to be revised so as to attract qualified persons to this Territory. The department should also further be strengthened with suitable addition of technical officers so that it may be in a position to cope effectively with the tremendous task that it has to perform in the very near future.

Outlay for this programme will be approximately Rs.10 lakhs.

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FORESTS

Forests are renewable natural assets and it should be recognised that such renewable natural resources of any Nation have to be preserved. The extent to which this can be done and the cost involved directly reflect on the quality of the life of future generations which in turn depends on establishing a sensitive balance between the population and these renewable natural resources.

Renewable natural resources include soil, water, and populations of plants and animals. These are functionally inter-dependent and inter-connected and given suitable conditions have the inherent capacity to increase and develop, and co-exist in mutual harmony of check and balance. These resources can be viewed in two ways - as a resource for man and as features having a value in their own right.

In the first two Five Year Plans, the schemes were centred round rehabilitation and consolidation of forests as an after-math of the Second World War. An attempt was also made to increase forest production by the creation of man-made forests. No Plan scheme was implemented by the department in the first Plan. In the Second Plan, however, the department executed the schemes involving a total financial outlay of Rs.93.05 lakhs.

The Third Five Year Plan laid special emphasis on the measures to meet the long-term requirements of the country and to ensure more economic and efficient utilisation of the valuable forest products. The most important

objective was to increase output from the existing forests by better techniques of timber extraction, promoting the use of secondary timbers, raising of plantations of industrially valuable species, and to undertake plantations of quick-growing species. During the Third Plan period, the Forest Department undertook schemes involving a total financial outlay of Rs.41.39 lakhs.

In the Fourth Five Year Plan, schemes were drawn up to:-

- (a) increase the productivity of forests,
  - (b) link forest development with various forest based industries;
- and (c) develop forests as a support to rural economy.

This Plan also envisaged activities as a continuation of past efforts at creating large-scale plantations of valuable quick-growing species and species of economic and industrial importance. The Fourth Plan schemes envisaged intensive exploitation and rational utilisation of the existing forest resources of these islands. Concerted efforts were also planned to regenerate areas worked for extraction of timber which was undertaken for industrial uses. A fuller utilisation of forest resources was conceived by encouraging the use of non-conventional woods and small size timber. The entire aim has been to attain self-sufficiency as early as possible for major forest-based industries such as pulp and wood panel products.

Stress was also laid on the management of Wild Life and Nature Conservation to preserve the habitat and to create sanctuaries for the preservation of rare and threatened species.

With these broad objectives in view, the Forest Department took up nine schemes in the Fourth Five Year Plan period as follows:-

Name of scheme.	Financial outlay for Plan period. (lakh rupees)	Physical target for Plan period.
1. Economic Plantation	28.00	Raising plantations of Teak .. 8200 ha. Padauk .. 245 ha. Matchwood.. 100 ha.
2. Development of minor forest product.	2.50	Natural regeneration of Cane .. 405 ha. Bamboo.. 202 ha.
3. Timber Extraction	16.00	Purchase of extraction equipment and saw mill machinery.
4. Consolidation of forests.	4.00	Survey and demarcation of protected and Reserved forests in the Andaman group of islands.
5. Nature Conservation	2.50	Estt. of a small zoo in Port Blair.
6. Cultural Operations	5.60	Tending and thinning operations over 3,019 ha. in Andaman & Nicobar Islands.
7. Forest Resources Survey	2.10	Enumeration and stock-mapping of forests over 340 sq. km.
8. Forest Research	5.90	Conduct of research on regeneration of species and proper utilisation of timber.
9. Estt. of Statistical Cell.	0.80	Collection of Statistical data on activities of the Forest Deptt.

Towards the second half of the year 1972-73, an additional scheme called " Intensification of Management " involving a financial outlay of Rs.5.315 lakhs and aimed at creation of two additional Divisions and strengthening of the staff at headquarters has been included for implementation under 'Forests'.

Outline of the Fifth Five Year Plan-Forestry Schemes

Forests in these islands will have to aim basically at satisfying present and future demand for major and minor forest products and for the productive and recreative functions of the forests taking into account the competing claims from other sectors and the urgent need for creating employment opportunities in the rural areas.

Productive forestry plays an important role in providing employment to the socially backward, unemployed and underemployed, particularly in the rural sectors of the islands. Consequently, developmental activities in the forestry sector will have to take cognisance of this potentiality.

Specific activities will need to be directed to preserve and maintain adequate forest cover for increasing productivity of the land for conservation of soil and moisture, for protection of reservoirs and other means of irrigation and ameliorating climatic excesses, bearing in mind the <sup>tremendous</sup> ~~generous~~ employment potentiality in the rural sector.

With the rapid industrialisation and urbanisation, the role of forestry in preserving the natural environment for maintaining an ecological balance, including wild life and the impact of such a cover for bio-aesthetic preservation, maintenance and improvement of the human environment for recreation, relaxation and sports have to be recognised and catered for.

The role of timber and other forest products in the economic development of these islands, particularly for constructional purposes, for the supplies of raw material to the growing wood-based industries and for meeting demands of domestic

Fuel and other kinds of energy needs paramount importance in developing industrial complexes.

The developmental and planning strategy during the Fifth Plan period would therefore be directed towards achieving the following pragmatic objectives which form important links between forests and people, forests and food and forests and wood.

#### Forest and People

It is an undeniable fact that forests are a necessity if the land is to remain habitable and productive for the people and that they have a considerable influence on the environment. Forests are the most complex of ecosystems and interact with other factors of environment in an almost infinite variety of permutations. It is necessary that the effects of the forests in conserving and enhancing environmental quality are recognised as a very important link between the forests and the people.

#### Forest and Food

It is well known that agriculture is the hand maiden of forestry and a very close relationship exists between farming and forestry. Farming cannot exist without forests. Farming and forestry are one single form of activity as both are concerned in putting to use for the benefit of mankind the human resources, and resources of soil, sun, water and air through the medium of animal and plants and their techniques are basically the same. Forest production and recreation activities are labour intensive and offer

the immense possibilities of eradicating the social evils of unemployment and under-employment. Through forestry developmental activities employment opportunities are proposed to be opened up to the extent possible in these islands. As such, provision of facilities to forest labour would also be needed.

#### Approach to the Fifth Five Year Plan

Forests play a multi-utility role in the economy of the country- The property of self-renewability and yielding of goods and services in perpetuity can only be maintained under proper scientific management. Forests ~~play~~ a three-fold simultaneous function, namely bio-aesthetic, protective and productive. All these functions are intimately connected with the three important links enumerated earlier, viz. Forests and People, Forests and Food and Forests and Wood..

The bio-aesthetic values of forests can be visualised by the fact that a large number of visitors seek refuge within the forest areas for recreation. The values of sylvan amenities and sports, recreation, scientific study and nature conservation are considerable, though not always discernible through economic cost analysis. The apathy of the general masses in an economically developing country will have to be eradicated through education and publicity in the matter of environmental protection, preservation and nature conservation. These suggestions have received the acceptance of the Government of India and will thus have to be taken up for implementation in the Fifth Plan period.

The protective role exercised by the Forests is already well known. It is recognised that even the inferior lands can be utilised for human welfare through creation of new forest resources. These islands are fortunate that they are occupied by rich forest wealth and it should be the attempt to prevent deterioration of these precious forest wealth.

The most readily appreciated functions of forests and their productive values in so far as they supply large quantities of wood and other multifarious forest products like firewood bamboo etc needed in every walk of human life. The per capita consumption of wood or other forest produces, processed or otherwise, is a yardstick of the national standard of living and an increase in the proportion of processed wood is directly related with an advanced economy and an advanced standard of living. Gearing up of the forest resources to the changing patterns and trends in consumption is thus unavoidable. Programme of forest development will, therefore, have to take into account the requirements of the future.

#### Major Tasks and strategy for the Fifth Five Year Plan.

In view of what has been stated above, it will be necessary to identify developmental schemes for discharging the three important obligations of forestry identified for the Fifth Plan, namely the links between forests and people forests and food, and forests and wood. It will thus be essential to identify areas of higher intrinsic productive values and capable of response to fiscal inputs within the catchments of the existing or future wood based industries and having some infrastructural facilities therein for



maximising the outputs through the fiscal developmental inputs made. It would be necessary to survey and demarcate such productive areas, survey the available resources if necessary from manageable administrative units, develop the necessary infrastructure through opening of new lines of communications and concentrate logging and regeneration activities. In other words, concentrated management, infrastructural development and regeneration coupled with research activities in suitable areas should be resorted to in the Fifth Plan period to meet the growing shortage of wood and wood products. It would also be necessary to select the species, particularly *C. glauca* for artificial regeneration with cane, so as to meet the needs of various wood-based industries. Since large compact blocks would be economically more viable than scattered patches of plantations care would be taken to identify such areas and raise plantations therein.

The continuance of efforts to have complete and adequate information on forests and forest activities in a retrievable and standardised form for economic planning is necessary for intensive forestry development activities.

The lack of a systematic organisation for extension activities in the forestry sector has resulted generally to an extreme lack of support to forestry development programmes and lack of forest consciousness amongst the people. This is detrimental to the interests of forestry and as such, it is proposed that a suitable forest-public relations publicity and extension unit be set up in the state as recommended by the Working Group of the Government of India.

Establishment of such a unit would go a long way in removing this serious shortcoming which has substantially affected the growth and development of forestry in spite of the tremendous potentiality in the field of economic development and particularly in its scope for eradicating unemployment and under-employment.

In order to achieve optimum results in the practice of forestry, it is essential to strengthen the base and increase the pace of research and education. This will be necessary in order to implement the co-ordinated research schemes to be implemented by the State under the guidance of the Forest Research Institute. This will necessitate the broadening and strengthening of the research base in these islands.

Developmental targets, investments and outlays for the Forestry schemes in the Fifth Five Year Plan.

Based on the achievements, of the past Plans, the projected needs of the future and objectives, and keeping in view the general pattern suggested by the Working Group of the Forestry Sector of the Ministry of Agriculture the Forest Department intends to undertake the following schemes for implementation during the Fifth Plan period. The broad magnitudes and targets proposed to be achieved under each of the schemes are indicated against each.

Union Territories Sector Schemes

1. Economic Plantations for Industrial and Commercial Uses.

The scheme envisages the raising the Teak, Padauk, Hollock, Champ and other important species over an area of 11,000 ha. over the five-year period as follows:-

Teak	1,600 ha
Padauk	400 ha
other species	<u>200 ha</u>
Total:	2,200 ha. annually =====

The scheme anticipates an outlay of Rs.209.708 lakhs to be spent and annually as follows :-

1974-75	Rs.39,59,080
1975-76	Rs.41,35,724
1976-77	Rs.42,31,118
1977-78	Rs.42,92,012
1978-79	<u>Rs.43,52,906</u>

TOTAL: Rs.209,70,840  
=====

2. Communications: The scheme envisages the development of communications in the forests of these Islands in order to improve extraction and better utilisation of the Forest produce from the remote and far-flung areas. It is proposed to construct 100 km. roads, 50 km tramlines and 10 jetties in the plan period at a total cost of Rs.77.102 lakhs as under :

<u>Year</u>	<u>Physical targets</u>	<u>Financial outlay</u>
1974-75	Roads 20 km. Tramline) 10 km jetties 2 Nos. )	Rs.13,37,080
1975-76	-do-	Rs.14,06,564
1976-77	-do-	Rs.15,31,048
1977-78	-do-	Rs.16,55,532
1978-79	-do-	<u>Rs.17,80,016</u>
Total:		Rs. 77,10,240      contd

3. Timber operations:- The scheme envisages the speedier and more efficient extraction of the timber resources of the Islands by the use of modern logging techniques and equipment. With the development of roads and implementation of this scheme, it is anticipated that the extraction of timber will increase by 2.52 lakh m<sup>3</sup> annually, thereby leading to greater intensification and better management of the forest resources that are considered suitable for export to foreign countries and that will provide additional raw material for wood and wood-based industries, thereby improving the economy of the country in general and of these Islands in particular. the scheme envisages an outlay of 352.304 lakhs as follows. Along with the schemes on intensification of management, improvement of communications, the scheme is anticipated to increase the revenue of the Department by 383 lakhs annually :-

1974-75	...	Rs.62,16,600
1975-76	...	Rs100,32,372
1976-77	...	Rs.88,00,258
1978-79	...	<u>Rs.27,12,154</u>
TOTAL:		Rs.3,52,30,480 =====

4. Consolidation: In order to facilitate sound management of forests and for future planning, demarcation of reserved and protected forests in these Islands is necessary. The scheme proposes the annual demarcation of 120 kilo hectares of the forest of these islands in the Fifth Plan and involves a total financial outlay of Rs.9.852 lakhs

1974-75	...	Rs.2,27,400
1975-76	...	Rs.1,87,020

1976-77	...	Rs.1,89,640.
1977-78	...	Rs.1,92,260.
1978-79	...	<u>Rs.1,94,880</u>
	Total	Rs.9,85,200 =====

5. Forest Protection: The forests of these islands are widely scattered. In order to protect more effectively, five mobile forest Protection Squads, each consisting of one Range Officer, One Deputy Ranger, one Forester and Four Forest Guards, are proposed to be set up during the Fifth Plan period. In the first year of the Plan, three such units are proposed to be set up. This will be followed by one in each of the two subsequent years. The total plan outlay on the scheme is envisaged at Rs.11.121 lakhs as detailed below:-

<u>Year</u>	<u>Physical target</u>	<u>Financial Out</u>
1974-75	3 units	Rs.2,19,180
1975-76	4 Units	Rs.2,05,709
1976-77	5 units	Rs.2,56,073
1977-78	5 units	Rs.2,35,769
1978-79	5 units	<u>Rs.2,45,465</u>
	Total	Rs.11,62,196 =====

6. Working Plan Organisation. It is proposed to undertake the preparation of Working Plans for three Divisions in these Islands during the Fifth Plan period in order to ensure the working of the forests on scientific lines. The scheme envisages the demarcation of forest boundaries, stock-mapping and enumeration of the stock, preparation of maps and collection of basic data required. An expenditure of Rs.10.763 lakhs is envisaged as per details given below:

<u>Year</u>	<u>Financial Outlay</u>
1974-75	Rs.2,53,600
1975-76	Rs.2,79,430
1976-77	Rs.1,76,260
1977-78	Rs.1,80,440
1978-79	<u>Rs.1,86,620</u>
Total	<u>Rs.10,76,350</u> =====

#### 7. Establishment of Mapping and Cartographic Unit

The normal and accurate working of the Forest Department involves the preparation and maintenance of a number of ~~maps~~ different types and categories of maps such as stock maps, resources inventory maps, topographic maps, management maps, serial maps etc, different scales for various needs. This is highly specialised work requiring specially trained technical staff. The scheme, therefore, envisages the setting up of a mapping and cartographic unit in this department. The outlay proposed for this Scheme is Rs.8,016 lakhs as detailed below:-

1974-75	...	Rs.1,63,840
1975-76	...	Rs.1,58,782
1976-77	...	Rs.1,52,724
1977-78	...	Rs.1,59,666
1978-79	...	<u>Rs.1,66,608</u>
Total		<u>Rs.8,01,620</u> =====

8. Intensification of Management. In order to-keep up with the tempo of development, and to ensure thorough exploitation of Forest/<sup>resources</sup>~~resources~~, it is necessary to implement this staff-oriented scheme. Increased exploitation of forests would ~~set~~ set the foundation for the establishment of factories

for the manufacture of wood and wood based products. These, will, in turn, generate trade and commerce, provide avenues for solving the unemployment and under-employment problems, promote export potential of the timber of these Islands, generate trade and commerce and help in building up the infrastructure necessary for the development of these Islands.

The scheme is proposed to be initiated in the second half of the financial year 1972-73 and suitably expanded in the Fifth Plan period. The scheme envisages the strengthening of the staff at headquarters, the creation of utilisation Division, and the opening up of four additional Divisions, namely Little Andaman, Baratang, Diglipur, and Nicobar. The implementation of this scheme is essential for the development and management of the forests of these islands.

In the first year of the Fifth Plan period, the Division at Baratang will be established. This will be followed by the establishment of the Diglipur Division in the Second Year of the Plan. The Nicobar Division is proposed to be established in the fourth year of the Fifth Five Year Plan.

The scheme involves a total financial outlay of Rs.106.525 lakhs as follows:-

1974-75	....	Rs.13,66,560
1975-76	....	Rs.20,66,946
1976-77	....	Rs.21,31,514
1977-78	....	Rs.25,05,520
1978-79	....	Rs.25,81,951
Total		<u>Rs.1,06,52,491</u>

9. Forestry Research. Large scale plantations have been undertaken by the Department in the past and are proposed for the future. With the implementation of these schemes a number of technical problems crop up. In order that results may be commensurate with the potentialities, a strong research foundation is necessary. The climate, edaphic and environmental conditions prevailing in these islands being entirely different from those in the mainland, extensive research work on systematic lines is needed on various forestry problems. Particular emphasis is also proposed to be focussed on seed quality and ~~seed~~ improvement for the raising of genetically superior plantations in these islands. The scheme on Forestry Research envisages a total outlay of Rs.18.804 lakhs as per details given below:-

1974-75	...	Rs.4,26,160
1975-76	...	Rs.4,40,918
1976-77	...	Rs.3,31,676
1977-78	...	Rs.3,35,784
1978-79	...	Rs.3,45,892

Total                      Rs.18,80,430  
=====

10. Forest Publicity. The problems of environmental pollution and erosion have assumed alarming proportions in many parts of the world, in present times. The wanton destruction of wild ~~life~~ has threatened the existence of some of the species which are found only in India today. The wanton destruction of forests in many parts of the country has ~~posed~~ <sup>posed</sup> serious soil erosion problems and threatened the life of multi-purpose reservoirs in the country. Education of the people plays a vital role in the conservation of these life-giving and life-



resources, and making the public forestry-conscious should therefore be one of the important activities of the Department if Developmental activities are to flourish. The scheme, therefore, envisages the setting up of a forest publicity unit, involving a total outlay of Rs. 6.670 lakhs as per details given below:

1974-75	..	Rs. 2,26,140
1975-76	..	Rs. 1,29,022
1976-77	..	Rs. 1,29,404
1977-78	..	Rs. 92,286
1978-79	..	Rs. 90,160
		-----
	Total	Rs. 6,67,020
		=====

11. Establishment of Statistical Cell. A Statistical Cell was established in the Department in the Fourth Plan period in order to collect, collate and correlate the data on Forest statistics relating to these Islands. With the expansion of the Department and increase in the developmental activities the compilation and collection of various data in readily retrievable form is a necessity and the need for the collection of data on lines approved by the Central Forestry Commission, so that proper evaluation and appropriation can be done on a standardised all-India basis. During the 5th Plan, it is proposed to maintain the cell set up earlier. The scheme envisages a total outlay of Rs. 1.574 lakhs spread over the Plan period as detailed below: Contd.....

period as detailed below:

1974-75	..	Rs. 29,720
1975-76	..	Rs. 32,106
1976-77	..	Rs. 30,492
1977-78	..	Rs. 31,878
1978-79	..	Rs. 33,264

Total Rs.1,57,460

12. Training of Staff. Management of the Department involves supervision and execution of works by trained technical staff in the field of forestry. It has been estimated that to successfully implement the Developmental Schemes as proposed in the Fifth Plan would require a total contingent of five officers, thirty-five Range Officers, seventy-three Deputy Rangers, one hundred fortyfour Foresters and three hundred seven Forest Guards. The last named three categories of personnel are to be trained locally by the Department and it is therefore essential that the local Forest School should be strengthened suitably. The scheme envisages the training of the above staff and involves a total financial outlay of Rs. 19,442 lakhs as per details given below:

1974-75	..	Rs. 7,25,180
1975-76	..	Rs. 4,48,264
1976-77	..	Rs. 2,95,348
1977-78	..	Rs. 2,32,432
1978-79	..	Rs. 2,42,016

Total Rs.19,43,240

Contd.....

13. Rehabilitation of Degraded Forests. Large tracts exist in the Nicobar group of Islands that are generally devoid of trees and carry abundance of coarse grass that are unfit for consumption by cattle and that cannot be utilised for industrial purposes. The reclamation of degraded lands by raising plantations of Casuarina, Eucalyptus and Cashewnut is therefore proposed under this scheme. One thousand hectares of degraded lands are thus proposed to be planted up during the Fifth Plan period involving a total financial outlay of Rs. 21,004 lakhs as detailed below:-

1974-75	..	Rs. 3,59,200
1975-76	..	Rs. 4,09,194
1976-77	..	Rs. 4,39,104
1977-78	..	Rs. 4,44,018
1978-79	..	Rs. 4,48,932
		-----
Total		Rs. 21,00,448
		=====

14. Nature Conservation:- The need of conservation of wild life and nature conservation has been recognised in these islands. It is proposed to maintain the small zoo established at Port Blair during the fourth plan period and to further enrich and expand it during the Fifth Plan. The scheme involves a total outlay of Rs. 3.299 lakhs as per details given below:

1974-75	..	Rs. 77,560
1975-76	..	Rs. 72,768
1976-77	..	Rs. 59,976
1977-78	..	Rs. 60,184
1978-79	..	Rs. 59,392
		-----
Total -		Rs. 3,29,880
		=====

Contd.....

15. Development of Pastures and Grazing. In order to improve the cattle wealth of these Islands, development of grasslands and pastures by introduction of highly nutritious strains of grasses is necessary. The necessity of the scheme can be gauged from the poor resources of milk and milk products available for the use of the people in these Islands. Lands in the forest areas available for pasture at present carry a luxuriant growth of coarse and poor quality grasses. The scheme therefore envisages the development of such lands by introduction of grasses and legumes as a first step towards the development of animal husbandry. It is proposed to cover 60 hectares of pasture land during the Fifth Plan period as a modest beginning, involving a total financial outlay of Rs. 2.696 lakhs as per details given below:-

1974-75	...	Rs. 56,480
1975-76	...	Rs. 52,804
1976-77	...	Rs. 53,124
1977-78	...	Rs. 53,448
1978-79	...	Rs. 53,772
		-----
Total		Rs. 2,69,628
		=====

16. Development of Minor Forest produce:- Development of Minor Forest Products is necessary in order to provide raw material for the developing cottage industries in these islands. The most important minor forest products at present in use are Cane and Bamboo. In order to meet

Contd.....

the increasing demand for these species, it is proposed to raise Cane and Bamboo over 200 hectares annually during the Fifth Plan period. The scheme involves a total outlay of Rs. 3.622 lakhs as per details given below:-

1974-75	...	Rs. 65,400
1975-76	...	Rs. 70,420
1976-77	...	Rs. 72,940
1977-78	...	Rs. 75,460
1978-79	...	Rs. 77,980
		-----
	Total	Rs. 3,62,200
		=====

17. Construction of Buildings:- Developmental activities of the Forest Department necessarily involve increase of staff for their successful implementation. Some of the schemes are labour intensive and housing facilities will be needed for at least 3 to 4 thousand labourers. With the intensification of management, creation of new Divisions is envisaged which will in turn involve construction of office buildings, and facilities for touring officers have to be developed for touring and inspecting officers for better efficiency and speedier execution of works. Residential accommodation will also be required for the additional staff required for the implementation of the fifth Five Year Plan schemes relating to Forestry sector. The scheme envisages the construction of the following buildings:-

Contd.....

1. Office building ... 4 (Offices of Deputy Conservator of Forests)
2. Rest Houses ... 4
3. Residential quarters ... 686 (for favour categories of Staff)
4. Tenements ... 750 (for housing 3,000 labour families).
5. Barraks ... 50 (for bachelor labourers)

The scheme envisages a total outlay of Rs.424.700 lakhs as per details given below:-

1974-75	... Rs.84,94,000
1975-76	... Rs.84,94,000
1976-77	... Rs.84,94,000
1977-78	... Rs.84,94,000
1978-79	... <u>Rs.84,94,000</u>
Total	<u>Rs.4,24,70,000</u>

#### 18. Amenities to Staff and Labour

The developmental activities of the Forest Department are generally in remote and cut-off areas. The schemes involve a considerable employment of staff and labour for their successful implementation and, as such, it is necessary to provide basic amenities for recreation for the personnel working in these cut-off and remote places. It is, therefore, proposed to set up 200 welfare units well equipped with basic recreational and other amenities, radio sets, reading rooms etc. The scheme involves a total outlay of Rs.42.000 lakhs during the Fifth Five Year plan period as detailed below:-

1974-75	... Rs.8,20,000
1975-76	... Rs.8,30,000
1976-77	... Rs.8,40,000
1977-78	... Rs.8,50,000
1978-79	... <u>Rs.8,60,000</u>
Total	<u>Rs.42,00,000</u>

19. Cultural Operations: In order to help the establishment of the young seedlings and saplings established naturally in

the regeneration areas of the forests, tending operations such as brush and weed control, thinning, climbing, cutting etc. are essentially required to be carried out. Failure to do so in the initial stages would adversely affect the quality of out-turn of timber at maturity. This is essentially a labour-intensive scheme and could provide sustained employment to a large number of unskilled labour. It is proposed to carry out cultural operations over 2,000 hectares of regeneration area during the Fifth Plan period. The scheme involves a total outlay of Rs.5.025 lakhs as per details given below:-

1974-75	..	Rs.1,02,500
1975-76	..	Rs.1,00,000
1976-77	..	Rs.1,00,000
1977-78	..	Rs.1,00,000
1978-79	..	<u>Rs.1,00,000</u>
Total	..	<u>Rs.5,02,500</u>

20. Soil Conservation. Though these Islands receive 3,300 mm of rainfall annually, yet there are no source of fresh perennial water supplies, thereby causing acute fresh water-supply problem in these Islands, Construction of reservoir and storage ponds is necessary not only to overcome this problem but also as an anti-erosion measure. Though over 70 percent of the land areas is under forests, considerable area is threatened by erosion. Collection of basic data on hydrological behaviour on catchment, causative factors of erosion and the effects of various land treatment in the forest area on erosion is necessary. It is therefore proposed to set up a

small water shed research station and to carry out anti-erosion works in the forest areas to protect agricultural lands. The scheme envisages a total outlay of Rs.15.557 lakhs as per details given below:-

1974-75	..	Rs.3,91,370
1975-76	..	Rs.2,87,413
1976-77	..	Rs.2,84,440
1977-78	..	Rs.2,91,483
1978-79	..	<u>Rs.3,01,026</u>
Total	..	<u>Rs.15,55,732</u> =====

21. Construction of Slipway: The Forest Department maintains a fleet of major and minor craft for the extraction of timber and working of the Department. At present, there is only one dry-dock of the Marine Department which is heavily booked for the repairs of vessels belonging to Marine and Other Departments. Thus, repair work to the craft of the Department suffers, thereby adversely affecting the tempo of extraction. The department, therefore, proposes to construct a dry-dock at Chatham. The scheme involves a total financial outlay of Rs.12,00,505 as detailed below:-

1974-75	...	Rs.5,95,900
1975-76	...	Rs.5,36,065
1976-77	...	Rs. 20,870
1977-78	...	Rs. 23,690
1978-79	...	<u>Rs. 24,580</u>
Total	....	<u>Rs.12,00,505</u> =====

B. Centrally sponsored Schemes

(i) Plantation of Quick-growing species: In order to feed



local industries with adequate supply of match logs and to boost up the production of the match factory utilising the raw materials the scheme involves raising of matchwood plantations over 1,000 hectares during the Fifth Plan period. At maturity after about 20-25 years, these plantations are expected to yield approximately 250 cubic metres of matchwood per acre annually. The scheme involves an overall outlay of Rs.21.085 lakhs as detailed below :-

1974-75	...	...	Rs.	3,60,280
1975-76	...	...	Rs.	4,10,494
1976-77	...	...	Rs.	4,40,708
1977-78	...	...	Rs.	4,45,922
1978-79	...	...	Rs.	4,51,136
		Total	Rs.	21,08,540

(ii) Forest Resources Survey :- In the Fourth Plan period, the Department took up a scheme to survey, stock-map and enumerate 140 Sq. miles (363 Sq.Km) of forest areas in these Islands. The work is necessary to prepare a resource inventory of these Islands for the proper management of the forests and utilisation of the products. This work is proposed to be continued in the Fifth Plan period when it is proposed to cover another 500 sq.km of forest areas. The preparation of working plan for the reorganised Divisions is also proposed under the schemes. The total outlay involved is Rs.6.609 lakhs as per details given below :-

1974-75	.....	...	Rs.	1,50,100
1975-76	.....	...	Rs.	1,27,340
1976-77	.....	...	Rs.	1,25,080

1977-78	..	Rs.1,27,820
1978-79	..	<u>Rs.1,30,560</u>
Total		<u>Rs.16,60,900</u> =====

C. Central Sector Scheme

(i) Logging Training Centre: The entire working of the Forest Department in these Islands is through departmental agency. The timber extracted from the forests is of the finest type available and suitable for export to foreign countries. To extract the potentially large quantity of exportable quality timber requires that the staff should be trained in the use of latest equipment and technology of modern timber extracting methods. It is, therefore, proposed to set up a Logging Training Centre in these Islands during the 5th Plan period. The scheme envisages a total outlay of Rs.21.675 lakhs as per details given below:-

1974-75	..	Rs.17,73,000
1975-76	..	Rs. 95,250
1976-77	..	Rs. 97,500
1977-78	..	Rs. 99,750
1978-79	..	<u>Rs.1,02,000</u>
Total		<u>Rs.21,67,500</u> =====

(ii) Raising of Red Oil Palm

Studies carried out in recent years show that the Andaman and Nicobar Group of Islands are ideally suited for the raising of Red Oil Palm which is a major source of Vegetable Oil. Studies were also conducted by experts of the Directorate of Oil seeds Development and Central Team on Development of Agriculture who have advocated the raising of these ~~px~~ plant-

to develop the economy of these islands. The project has already been cleared by the Planning Commission. It is, therefore, proposed to raise Red Oil Palm plantations in these islands over an area of 2400 hectares during the Fifth Plan Period as follows:-

1974-75	..	100 hectares
1975-76	..	200 hectares
1976-77	..	600 "
1977-78	..	700 "
1978-79	..	800 "
Total	..	<u>2,400 hectares</u> =====

An outlay of Rs. 391.09 lakhs is proposed for this scheme.

(iii) Raising of Rubber Plantations.

A survey carried out some years ago revealed that these islands have an excellent potential for the raising of Rubber Plantations as the agro-climatological conditions are ideal for the purpose. In consultation with the Rubber Board, a scheme for the raising of Rubber Plantations in these Islands has been prepared by the Department and submitted to Government of India for sanction. The Inter-Departmental team on Accelerated Development Programme of the Andaman and Nicobar Islands have also strongly recommended the raising of Rubber Plantation for the economic development of these Islands. It is, therefore, proposed to raise Rubber Plantations over an area of 1,520 hectares (3,800 acres) during the Fifth Plan period as detailed below:-

1974-75	..	- (Preplanting year)
1975-76	..	40 hectares
1976-77	..	160 "
1977-78	..	180 "
1978-79	..	840 "
Total		<u>1,520 hectares.</u>

An outlay of Rs.298.38 lakhs is proposed for this Fifth Plan for the Scheme.

Total States Schemes	..	Rs.1362.290
Total Centrally Sponsored Schemes	..	Rs. 27.694
Total Central Sector Schemes	..	<u>Rs. 611.145</u>
Grant Total		<u>Rs.2001.129</u>

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Development of fisheries was taken up in this Territory for the first time during the Second Plan Period. The outlay for the Plan was Rs.1.75 lakhs. No major development programme was undertaken during the Plan except minor schemes aimed at improving the socio-economic conditions of the fishermen. Against the outlay of Rs.1.75 lakhs an amount of Rs.2.362 lakhs was spent during the Plan. The Third Plan outlay was Rs.14.77 lakhs. During the plan the Department took up Schemes like Settlement of Fishermen, Training of Fishermen in mechanised fishing, supply of Fishing materials, Setting up a Cold Storage and Ice Plant etc. During the Fourth Plan, the Department was entrusted with regular development work only as major programmes like mechanisation of boats, construction of Fishery Harbours, Training of candidates in mainland etc. were taken up separately under accelerated Development Programme. As such a small outlay of Rs.6.502 lakhs was given for the plan. Seven Schemes are under implementation under the Plan.

2. Although we do not have established scientific data about the richness of the fishery potential in the waters around these islands, our experience over the years has proved it beyond doubt that fishes like Tuna, Macheral, Perches etc. are available in these waters for commercial exploitation. That time and again foreigners have been poaching into our Territorial waters for undertaking fishing operations on a large scale also proves this point. The Off-shore Fishing Station set up by the

Ministry of Food and Agriculture is engaged in surveying the off-shore area with a view to assessing the fishery potential in these waters. Insistence on the completion of systematic survey before starting development of fishery resources on a large scale here would only delay things for an unduly long time. Starting large scale operations for commercial exploitation of fishes like Tuna, Mackerel, Perches etc. found in these waters pending completion of the survey will not be too much of a risk.

3. Much has not yet been done to tap the fishery potential in these waters. The programmes being carried on from the Second Five Year Plan onwards have only touched the fringe of the problem. The total outlay on 'Fisheries' since the Second Plan including the Fourth Plan comes to about Rs.30.675 lakhs only. The schemes mainly related to settling a few fishermen families, purchase of fishery requisites, providing training in mechanised fishing to fishermen etc.

4. Ironically enough in these islands even now fish is not a commodity that is freely available in the market inspite of apparently rich fishing grounds that surround this Territory. Our efforts to tap the fishery potential have helped in increasing the catch over the years although even now the catch by itself is not very significant. In 1966 the total quantity of fish caught in these islands was 341 tonnes while it increased to 500 tonnes in 1970. This is estimated to be 600 tonnes at present. Calculating the minimum requirements of 100 grammes per capita, per day, the total requirement at

present will come to 4,200 tonnes per annum. This demand is expected to increase to 5,500 tonnes by the end of the Fifth Plan. It is, therefore, necessary to think in terms of large scale exploitation of the fishery wealth existing in the territorial waters of these islands.

Introduction of mechanised fishing is the first step to be taken for successfully tapping the fishery wealth. It will be worthwhile to evolve a scheme for construction of a large number of 20 to 30 ft. mechanised boats of a suitable design each having atleast two tonnes capacity to accommodate fish and ice in its hold.

These boats can be given to individuals or a group of trained fishermen on hire-purchase system. In addition there should be a scheme to provide dinghies fitted with out-board motors to the fishermen. This will go a long way in increasing the efficiency of the local fishermen.

This will also help them catch fishes like Caran Seer Fish, Blue Fin Tuna, Rock Cod etc. which are ~~caught~~ caught by line only. These schemes apart from increasing the fish catch will also provide considerable employment opportunities to the local population.

Fish caught by the above mentioned methods will be able to satisfy the local requirements. For commercial exploitation, one has to think in terms of large scale projects. Such projects could make use of the purse seining method for catching Mackerel and other Shoaling Fishes. This would involve heavy investment in big fishing vessels with arrangements for deep freezing etc.

There is, apparently, ample scope to start two such projects in this territory, one at Port Blair and the other at Nancowry or Campbell Bay. The project at Nancowry or Campbell Bay can commercially develop tuna long lining since movement of tuna is centered around 5 degree North and South latitudes.

Undertaking such big projects will bring in a series of problems which are to be simultaneously tackled to make the project a success. It would be necessary to get trained hands in long lines and Purse seining operations and this may even necessitate training a few people abroad particularly for purse seining since such facilities are not available in India. The problem of storage will have to be solved by setting up a large cold storage and ice plant with arrangements with deep freezing. The present cold storage with its 15 tonnes capacity will not be able to meet the requirements, once large scale commercial exploitation starts.

Processing and marketing will be another problem. Installing mechanical driers at various places will help processing to some extent. This, does not require heavy investment, as mechanical driers can be procured at comparatively cheaper rates from the mainland. Starting of a fish meal plant will help conversion of surplus and waste fish to fish meal for poultry and animal feed.

It will be necessary to get at least two carrier vessels with cold storage facilities for transporting fish to the mainland for marketing. It may be easier to find markets in the South East Asian countries for the fish caught in these waters. Direct export of the fish from



this place to the South East Asian countries would require a policy decision by the Government of India.

Large scale mechanised operations would require adequate berthing and landing facilities. The problem will be solved to some extent, when the fishing harbour at Phoenix Bay is completed. A little dredging around the Aberdeen Jetty and its extension by a few metres can solve the problem of accommodation of small mechanised boats.

#### Autonomous Corporations and Private Enterprise.

Undertaking all these operations directly by the Government will be a cumbersome venture. It will be better if an autonomous Corporation is set up for exploiting the fishery wealth in these islands. The Corporation will have the added advantage of getting financial assistance from many sources which are not normally available to a Government agency.

The question of involving private enterprise in such large scale operations also needs to be looked into. It would be worthwhile to examine if adequate incentives by way of permitting direct export to the foreign countries from these islands, allotment of land on priority basis for setting up their various units etc. can be given to private entrepreneurs. Once such a policy is decided upon and adequate publicity is given to the incentives offered, it is quite likely that private entrepreneurs will be attracted and will be engaged in exploitation of the fishery wealth in these islands in a big way.

In spite of all these, it will still be necessary to help traditional fishermen financially and otherwise. For this purpose schemes which are being implemented by this Administration like grant of fishery requisites at subsidised rates, other concessional facilities to the fishermen settlers etc. will have to be continued in future also.

Programmes for the Fifth Plan.

In the absence of a corporation of adequate private enterprise in the field of Fisheries, the entire onus of delivering the goods falls on the Fisheries Department. The following schemes are suggested for implementation by the Fisheries Department during the V Five Year Plan :-

I. Assistance to traditional Fishermen:

(a) Settlement of Fishermen Families.

Fishing Industry in India mainly depends on traditional fishermen population. At present the local fishing industry depends solely on about 600 active fishermen. They are mostly migrants from the maritime states like Andhra, Tamil Nadu and Kerala. The majority of them are a floating population. For the development of the fishing industry it is very essential to increase the number of professional fishermen. During the Fourth Plan period, so far 19 families have been brought and settled under the scheme 'Settlement of Fishermen Families'. 21 more families will be brought and settled during the rest of the ~~the~~ plan period. It is proposed to settle 500 families during the Fifth Plan period. An outlay of Rs.25 lakhs may be required for the

scheme. This will give employment to 500 families and their dependents and increase the fish catch by about 1250 tonnes.

(b) Supply of Fishing materials.

Fishermen are an economically backward class and state assistance is necessary for improving their living conditions. There are about 600 regular fishermen and about 1500 part time fishermen at present. Apart from these, there is the tribal population like the Nicobarese and the onges who have fish as their main food. The assistance given in the present plan may continue in the Fifth Plan also. During the Fourth Plan period, so far, Rs.1.054 lakhs has been spent on the scheme out of a provision of Rs.2.5 lakhs. The remaining amount will be spent by the end of the Plan period. It would be appropriate to suggest a provision of Rs.7.5 lakhs during the Fifth Plan taking into consideration the anticipated increase in the fishermen population.

II. (a) Small boat mechanisation:

The continental slope of 100 fathoms comes to 20 to 200 miles in the west coast and 2 to 23 miles in the east coast. Traditional fishermen from time immemorial have been fishing in this area and mechanisation is resorted to, to improve the harvest from known fishing grounds. Mechanisation programme will have to be based on the data emanating from the study of fishing grounds. This is the biggest handicap in the implementation of mechanised fishing programme, in these waters. In the Fourth Plan there is a programme to undertake survey of grounds by small boats.

For about 3 months the weather conditions are not favourable for fishing here. Mechanised fishing programme will have to be linked with processing and marketing. It is felt that mechanised boats whose length is less than 10 mt. will not work profitable in this territory. Each boat must have atleast 2 tonne capacity to accommodate ice and fish in the fish-hold, apart from net and equipment. It is suggested that 20 of 32' boats and a few 45' boats be constructed and put into operation during the Fifth Plan. This will cover a wider area of fishing ground. The boats will be given to individuals or groups of trained fishermen on hire purchase system.

This will give employment to 120 trained fishermen on the boats and for about 300 on the shore. Rs.37.50 lakhs will be the outlay of which 50% will be loan. This will result in an additional 10,000 tonnes of fish landed.

(b) Country boat mechanisation:

Fishes like Caran, Seer fish, Blue Fin Tuna, Rock Cod etc. are caught by-line only. Fisherman waste considerable time in going and coming from the fishing grounds. If small out-board motors are fitted in dinghies the efficiency of the fishing will improve to a great extent. It is proposed to mechanise 100 country crafts at a cost of Rs.3 lakhs under the scheme. This will give employment to 100 trained and 100 untrained fishermen and land about 1250 M. tonnes of fish.

III. Deep Sea Fishing.

It is proposed to start commercial exploitation by undertaking two projects.

(a) Fisheries Project, Port Blair :- This project is proposed to develop purse-seining for mackerels and other shoaling fishes found in large quantity. The Fisheries Harbour under completion at Phoenix Bay can be utilised for the vessels of the project. Cold Storage, ice plant and freezer will be part of the project.

(b) Fisheries Project at Nancowry/Campbell Bay :

Movement of Tuna is concentrated around 5 degree North and South latitude. This project is proposed for commercial development of Tuna long lining.

The outlay for the projects will be about Rs.184 lakhs and the anticipated revenue will be about 100 lakhs per year.

In the implementation of the project it is necessary to get trained Shippers in long line operations and purse-seining or get local candidates who have completed ordinary training for further advanced training in these lines. Marketing facilities through direct shipping to South East Asian countries are also to be arranged.

#### IV. Processing and Storage :

Whether it is for local marketing or for export, processing and marketing have a vital role to play in the development of fishing industry. Fish being highly perishable, proper storage and handling during marketing are most important. In the two projects proposed above, provision is given for the storage of fish, caught by the vessels. However fish catch is expected to increase considerably by the implementation of the other schemes and it may not be possible to find ready market for the catch. It is proposed to erect 10 mechanical driers at

cost of Rs.2.00 lakhs at selected fishing centres. It is also proposed to establish a fish meal plant at Port Blair for the conversion of surplus and waste fish to fish meal for poultry and animal feed.

#### V. Marketing :

It is proposed to get two carrier vessels with cold storage facilities for the transport of fish to mainland for marketing. The cost of two such vessels should be about Rs.60 lakhs. For the collection and transport of fish from various fishing centres it is proposed to purchase a fish van also under the scheme. This would cost Rs.1.25 lakhs.

#### VI. Berthing and Landing facilities:

With the introduction of mechanised fishing boats there will be acute shortage of berthing and landing facilities. The Aberdeen Jetty with a little dredging and extension can accommodate about 100 mechanised boats. This may cost about Rs.5.00 lakhs.

#### VII. Training.

One training centre is proposed to be started during the Fourth Plan period. This will continue in the Fifth Plan also with additional arrangements to handle more trainees.

For further training, candidates will be sent to the mainland. A few persons will have to be sent to foreign countries for training in purse-seining and long lining. An outlay of Rs.2.5 lakhs is proposed for this scheme.

#### VIII. Extension.

The scope of extension work is limited to tribals and semi-tribals.

and few traditional fishermen. Propaganda work in the application of modern fishing methods and demonstration work to the tribals will continue in the fifth plan also. During the Fourth Plan there is no separate provision for this purpose. An outlay of Rs.1.00 lakh is proposed for the Fifth Plan for extension.

#### IX. Introduction of Inland Fisheries.

Though there is only limited scope for inland fisheries development, a small scheme is suggested keeping in view some of the reservoirs likely to come up in the Fifth Plan period. Rs.0.5 lakh may be kept for the scheme.

#### X. Administration.

Raw materials for development here are readily available for only two departments (i) Forest (ii) Fisheries. The Forest Department has got 85 years of its history and is well established, whereas development of fisheries started only recently. Not much importance could be given to this department so far. The absence of a senior officer to direct and implement programmes and policies of the department may be pointed out as one of the main causes for the slow development. The officers are brought on deputation and as a result continuity is lost and a long term view has not been possible at the level of execution of programmes. Even after 15 years the set up of the department is still inadequate. Unless this set up is strengthened based on the programme proposed, and streamlined on various points there is little future for the department.

A full fledged directorate with a senior man as Director of Fisheries assisted by two Assistant Directors and suitable additional staff should be established for the smooth implementation of the schemes. The post of Director of ~~xx~~ Fisheries should be filled in by direct recruitment whereas the post of Assistant Directors can be filled in by promotion/direct recruitment/deputation.

Following are the Schemes and approximate outlay proposed for the Fifth Plan.

<u>S.No.</u>	<u>Name of Schemes</u>	<u>Outlay proposed</u> <u>(in lakhs)</u>
1.	Settlement of Fishermen Families	25.00 lakhs
2.	Supply of Fishing materials	7.50 "
3.	Small boat mechanisation	37.50 "
4.	Country Boat mechanisation	8.00 "
5.	Fisheries Projects 2 Nos.	184.50 "
6.	Processing and Storage	2.00 "
7.	Marketing	61.25 "
8.	Berthing and Landing	5.00 "
9.	Training	2.50 "
10.	Extension	1.00 "
11.	Inland Fisheries	0.50 "
12.	Administration	4.00 "
	Total	Rs 338.75 "

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CO-OPERATION

'Co-operation' occupies an important place in all Five Year Plans of our country. Economic development along democratic lines offers a vast field for the application of co-operation in the various sectors of development.

There was no integrated First Five Year Plan for these Islands. The second plan was the First Plan for this Territory. There were only 4 schemes included in the Second Five Year Plan under sector 'COOPERATION' with an outlay of Rs.0.75 lakh . These schemes were as follows:-

- |   |           |
|---|-----------|
| (1) Extension and Development of Rural Credit   | 0.20 lakh |
| (2) Cooperative Marketing   | 0.19 "    |
| (3) Construction of Godown for Cooperative Societies.                                   | 0.30 "    |
| (4) Scheme for providing subsidy to the societies for maintaining the Managerial Staff. | 0.06 "    |

During the Plan period one large sized Agricultural Credit Society was organised and assisted by way of Share Capital participation of Rs.20,000/-. Under the Scheme for development of Marketing, 2 Societies were organised and assisted by way of share capital participation of Rs.19,000/- and Godown Loan and subsidy of Rs.30,000/-. A sum of Rs.2,000/- was incurred on subsidy to Cooperative Societies for maintaining managerial staff. Initially altogether 6 Schemes involving a total outlay of Rs.1.474 lakhs were formulated for implementation during the Third Plan. These Schemes were later on revised and 9 Schemes with a total outlay of Rs.3.960 lakhs were included.

In addition to the above 9 schemes, a scheme for strengthening the Cooperative Department also existed. A sum of Rs. 6.641 lakhs was incurred for the implementation of the above said 9 schemes. An expenditure of Rs.1.953 lakhs was incurred on the scheme entitled 'Strengthening' of the Cooperative Department.'

During the 3 consecutive Annual Plans 11 schemes including one for development of Consumers' Cooperative were implemented. Total expenditure incurred under the schemes was Rs.8.391 lakhs.

Eleven schemes with an outlay of Rs.14.77 lakhs were formulated for implementation of Fourth Five Year Plan of this Territory beginning from 1st April, 1966. Due to the National Emergency, the Plan was deferred and the Three Annual Plans were implemented. Basing on the past experiences, the Fourth Plan was revised and included 13 Schemes for implementation under Cooperative Sector with an outlay of Rs.16.800 lakhs.

The schemes related to

- (i) Grant of Special Bad Debts,
- (ii) Construction of Godown,
- (iii) Organisation of Labour Cooperative
- (iv) Cooperative Training and Publicity,
- (v) Dairy Development and Milk Supply and
- (vi) Development of Industrial Workers Stores.

Impact of the Schemes in relation to benefits extended to the Community.

By organisation of Cooperative Agricultural Credit Societies among the agricultural community, the benefits of various type of services are made available to them. These societies advance

credit on reasonable terms to their members and thereby help them in their agricultural operation. The loans advanced to the Agricultural community by these societies in 1969-70 and 1970-71 amounted to Rs.3.00 lakhs and Rs.3.59 lakhs respectively. In case these Societies were not in the field to assist the agriculturists, they would have to be under the clutch of unscrupulous money lenders. Schemes for grant of managerial expenses actually helped the cooperatives to some extent to establish their working in the initial stages.

As per data available from the 1961 Census these Societies have covered about 61.51% of the household families in the rural areas of the Andaman Group of Islands by 1970-71, in the area of operation of these societies. The Andaman group of Islands consisting of 242 villages as per 1961 census have almost been covered by these Societies. At the end of Fourth Plan, we should go for consolidation i.e., qualitative development of these societies and we should merge the weak societies with the stronger viable units. At present we have no provision in the Cooperative Societies Act. It is expected that new Regulation will have been passed by that time. The Byelaws of the Cooperative Societies may have to be suitably amended to facilitate all the accepted policies with regard to rural credit.

In these Islands two-tier system of credit structure prevails. The Andaman and Nicobar State Cooperative Bank which performs the functions of the Central Bank also was formally started at the close of the Third Five Year Plan and has great role to play in financing the Cooperatives and thereby helping agricultural

production. It is expected that by the end of the Fourth Plan the quantum of Agricultural Finance both short and medium term will go upto about Rs.8 lakhs.

The consumers movement has also gained momentum during the Plan period. But it could not progress much as was expected from it particularly at the Primary level. The main task of the Department should be to consolidate and reactivate the primaries which have gone weak or defunct for some reasons or the other. Such Societies having potentiality will have to be assisted as recommended by the conference of Ministers of Cooperation in 1971 and various other All India Conferences.

In spite of the limitations faced by these cooperatives, the movement has helped in keeping a check on the price line to a considerable extent. In the remaining years of the Fourth Five Year Plan and Fifth Plan our endeavour should be to make purchases from the source of production, Mainland Federations and Established Consumers Industries as far as possible to avoid middlemen and we shall have to assist the Wholesale Stores financially to a considerable extent.

#### Bottlenecks.

The major difficulty experienced in the way of development of Cooperatives of various types was our inability to assist all the Societies which need such assistance. Under the existing terms and conditions only Societies which are financially sound and are running at a profit can be assisted with working capital. In fact it is the weaker society with its limited resources but with a good potentiality that needs assistance. These types of Societies can neither get the financial requirement from the Government nor from

the Banks. This aspect needs a thorough re-examination and measures to assist such societies have to be evolved.

(ii) Adequate strengthening of the Departmental Machinery is another factor which is most closely linked with the development of the movement in this Territory. Owing to the general backwardness of the Territory, the mainland norms can hardly be made applicable here. Supervision of Societies here means much more than what it implies on the mainland. As such special consideration would have to be made in the matter of staffing the department. Besides intensifying the supervision and inspection of Societies specific Schemes will require the services of departmental staff on deputation to the Key posts in the various bigger institutions like Bank, Wholesale Stores, marketing Federations, Saw Mill, Transport Cooperative, Dairy Farms etc.

(iii) Allotment of suitable sites to Cooperatives for construction of Show-cum-godown should also be given the required preference.

(iv) Lack of general awareness and active interest among the members is a great hurdle for improvement of affairs of Societies. Continuous education in cooperation through various media is a great necessity. Adequate staff and funds will have to be provided for.

(v) With the changes in the policy and procedure of Cooperative practices and management it is necessary that the departmental staff should be well equipped with upto date knowledge of the movement. Regular training of the staff has, therefore, to be ensured.

(vi) Coordination among the various development departments is a necessity to ensure coordinated action in the field. At the time of formulation of the Fifth Plan Schemes it should be ensured that such action is reflected in the Schemes formulated by the various development departments.

#### Approach to the Fifth Plan.

With a view to maintaining a tempo of development and deriving greater benefit out of it, pointed attention is intended to be given to certain sectors in the Fifth Plan. This priority sectors under Cooperation in the Fifth Plan are indicated below:-

1. Agricultural Credit.
2. Consumer's Cooperation.
3. Cooperative marketing.
4. Cooperative training and Education.
5. Cooperatives for the weaker sections.
6. Dairy farming, transport and Housing Cooperation.

To implement the various schemes more efficiently and more effectively, strengthening of the department is also envisaged.

#### Agricultural Credit.

The programme of cooperative credit is linked with the programme of reconstruction of agricultural economy which involves, among other things, increased productivity, greater competence of the peasantry, irrigation facilities, availability of inputs in adequate quantity and removal of the handicaps imposed on the actual cultivators through existing tenurial arrangements. The effect of green revolution on the mainland is yet to be felt in this Union Territory. This essentially calls for emphasis on intensive utilisation of ground water resources and high yielding varieties seeds with heavy doses of fertilisers which itself is a safeguard against uneconomic, unavailable agricultural credit structure. On the acceptance of the policy of channalising all agricultural credit structure. On the acceptance of the policy of channalising all agricultural credit through the cooperative credit structure, the multiple agencies in the field will cease to exist. This will help in making a realistic assessment of credit requirements, its dispensation and recovery.

The reorganisation of our weak rural credit structure should be the first and foremost target in achieving socio-economic justice, raising agricultural production, ensuring equitable distribution of income and blocking disguised unemployment in our rural economy. This will be possible through a phased programme of amalgamation of non-viable societies, liquidation of very weak units, redemarcation of areas of operation of each new cooperative on a more rational basis preferably by making them conterminous with the panchayats, reactivising and reorganising managing committees on sound lines, further share capital drive, better supervision departmentally and through the state cooperative bank, rationalised and production oriented lending policies and besides other steps by investing fresh funds in these Societies purely with the objectives of enhanced production and employment generation.

Once the agricultural credit societies have been re-organised on sound viable pattern within a reasonable time, these cooperatives will be enabled to play a leading role in respect of distribution of fertilisers, improved seeds and implements which are now being dealt with by the Agriculture Department direct. Besides, these Societies could also offer storage facilities, effective linking with marketing, land development activities etc. To achieve these objectives within the Fifth Plan period, adequate subsidies for enabling the Societies to keep proper trained full time managerial staff will have to be provided for. The need for providing subsidy has got an added significance in the context of the very weak agricultural credit structure at the base at present.

The foregoing observations would essentially thrust bigger responsibilities and tasks on the State Cooperative Bank which is to play the key role in financing agriculture credit. The State Coop. Bank is already in a competitive position with other commercial banks ~~is already in a com~~ in this Union Territory in case of resources mobilisation. In the absence of a Land Development Bank here, the A & N State Cooperative Bank has been asked to undertake the functions of a Land Development Bank as well dispensing long term agricultural credit for effecting all types of improvements in Agricultural lands. The State Cooperative Bank will be expected to phase out its expansion programme accordingly.

The Fifth Five Year Plan will naturally demand greater credited dispensation by the State Cooperative Bank particularly to the Agricultural Schemes. Resources mobilisation, and effecting better supervision and control over the Primary Agricultural Credit Societies will require the Bank to undertake a judicious branch expansion programme. Since this bank is the only Central Bank having the Status of the Apex Bank in the Territory and is still its infant stage it has to be assisted by the Govt. for building it up organisationally and financially. It is expected that by the end of the Fourth Plan period the Bank will be having 3 Branches which is likely to be increased to 8 by the end of the Fifth Plan period.

The expectation is that agricultural credit requirement during the Fifth Plan period would be to the order of about Rs.80 lakhs out of which Rs.50 lakhs will be for short term, 10 lakhs for medium term and 20 lakhs for long term. The above assessment is made on the assumption that all agricultural credit supplied by various Govt. Departments will be routed through the Cooperative Agency.

#### Consumer Cooperatives.

The pressure on prices of consumers and other essential commodities is a serious concern to our economy. The efforts of the Government including the building up of buffer stock of agricultural commodities need to be reinforced by organised action by the consumers themselves. The development of a sound consumer cooperative structure needs pointed attention and persistent efforts during the Fifth Plan period. During the last decade we have undertaken the reorganisation of the consumer movement by establishing 2 Whole sale stores in this Territory which have largely succeeded in enlarging and diversifying their business operations. The progress already achieved in the Fourth Plan period will need to be maintained and the Wholesale Stores further consolidated strengthened to enable them to extend their business coverage to as large areas of the territory as possible. Experience has shown that the Wholesale Stores with their better organisational structure and greater resources are more suited to serve consumer interest better in certain areas through their Branches than the small primaries which lack both in organisation and financial availability. Taking into consideration the possibility of Mayabunder Jetty being commissioned by the end of the Fourth Plan period and the



scope of ships directly calling at Mayabunder Port, felt that a Wholesale Store at Mayabunder may be organised, Though the group expressed its preference for a unitary type of organisation for consumer cooperative movement it was felt that according to the suitability and the needs of a particular area a mixed pattern of unitary and federal system may also be evolved and adequate funds provided under the Plan Schemes.

With a view to ensuring proper distribution of consumer and essential commodities through the network of consumer co-operatives the pressure on manufacturers and suppliers of consumer goods should be maintained so that they meet the requirement of consumer cooperatives on priority basis, and fully honour their commitment in regard to the commodities for which specified quotas have been earmarked for consumer cooperative and increase the quota where necessary.

The gaps created by the failure of consumer cooperatives in various areas will have to be filled up and the procurement policy of the wholesale Stores will have to be reoriented so as to ensure a greater participation in the procurement programme of institutions like NCCF and NAFFD. To ensure uniformity in development of Consumer cooperation in the various areas, the scope of the Government of India Guarantee Scheme may have to be extended to selected primaries as well, and as assistance over and above the State Plan Ceilings may have to be provided for.

The Industrial Workers' Cooperative Stores which cater to the needs of the employees of Industrial establishments will have to be encouraged and strengthened. In this regard special attention will need to be paid to the workers of the Forest, P.W.D. and Marine Department who constitute the bulk of the working class in this Territory. The benefits of higher wages etc. can hardly tone up their economy unless consumer goods can reach them at the most reasonable rates and unless they can be protected from unscrupulous exploitation by private traders. Liberalisation of conditions for Government financial assistance to this category of Stores will have to be ensured and Government being the biggest labour engaging agency will have to come forward to provide all required financial assistance under liberalised terms. But as these Societies do not come under general type of

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consumers cooperative because of restriction in their membership it should be ensure that besides the benefits extended to them under the Industrial Truce Resolution 1962 these stores should also be provided with working capital loans etc. from out of the budgets of the concerned Government Departments.

The benefits of the consolidation and development of the Consumer movement will not only keep a check on the market prices both in urban and rural areas, but will <sup>also</sup> create better employment opportunities. The internal resources of the movement will, however, fall far short of their actual requirements and the Govt. would be required to extend liberalised financial assistance. After all, the benefits on higher productivity etc. can be felt by the common men only if the tendency of rising prices of essential consumer articles could be held under check.

#### Cooperative Marketing.

The main object of cooperative marketing is to enable the growers to market the surplus produce to their best advantage and for this purpose to streamline the whole process of movement of goods to the consumers market. It would, however, be observed that the growth in this direction in this Union Territory has been very poor.

There are, of course, obvious reasons for such poor growth in cooperative marketing structure in this Union Territory. Unlike the mainland the varieties of agricultural produces are far more limited here. The study made by the Agricultural Directorate of this Territory in their recent toucher reveals that the production in Rabi crop is still to gain its commercial marketing level. Commodities left with area (i) paddy (ii) certain varieties of fruits (iii) cash crops viz. coconut and arecanut. If the distribution of these crops are studied, it will be seen that in North and Middle Andamans the main crop, where Agriculture surplus exists, is paddy. The production of cash-crops and fruits is very much limited.

In South Andamans both paddy, some cash crops and limited varieties of fruits to certain extent could be considered having agricultural surplus.

In Nicobar group of Islands only cash crops viz. coconut and arecanut are having agricultural surplus. It is needless to

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mention that the cooperatives functioning in North and Middle Andamans can deal mainly in ~~procurement~~ and processing paddy. In South Andaman there is scope in dealing in paddy as well as in-cash crops and in Nicobar only in cash crops.

The two Primary Marketing Societies organised in South and Middle Andaman could not play their role in the procurement of paddy, rice because as per the existing procedure, the Supply Department directly procures paddy/rice from the growers at price fixed by the Administration.

In most of the states the foodgrains are procured by the Marketing Cooperatives from the members and non-members growers in the Govt. Supported price. They supply the produces to marketing federations where processing, gradation etc. are done and then procured by the FCI. /\*To give fillip in organisation and strengthening of co-operative marketing societies in this territory the present procurement policy may have to be reviewed and such procedure adopted as would enable the marketing societies to involve themselves in the procurement of paddy and process the paddy into the rice for supply to the Supply Department for distribution through the EPS. This would enable the marketing societies to play their role and would also exercise an effective check on the price line.

In view of the potentialities existing and scope of having new dimensions in this field there is ample scope of organising, revitalising primary marketing in North, Middle and South Andaman provided of course the procurement policy is suitably reviewed and amended. With a view to developing cooperative marketing in this Territory, a State Level Marketing Federation will be required to be organised. This federation will provide

/\* For redistribution. The areas which are not covered by the marketing Societies are covered directly by the FCI. Contd.....

for centralised marketing, participate in the procurement operation and ensure economy in business, formulation of marketing policy, market study, costing and evaluation and maintenance of flow for export commitment etc. The formation of a regional federation for the Nicobar group of islands should also be further studied.

The approach to this sector should, therefore, be so determined as to (i) involve the marketing societies in procurement operation of all agricultural produce to the maximum extent possible (ii) extend the activities of the Marketing Societies in field of grading, processing etc. (iii) establish a state level marketing federation so that all forms of assistance from the National Federation can be availed of (iv) provide adequate assistance for the development of cooperative marketing (v) to associate the Department more closely with the expending activities by placing suitable persons on deputation to the marketing Federation of the Societies (vi) construct a number of Warehouses/Godowns at place like Port Blair, Rangat, Diglipur, Little Andaman and Campbell Bay.

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Cooperative Training & Education.

The target of Cooperative Education, Training, Study Tour etc. would not be fulfilled upto a satisfactory level by the end of the Fourth Plan. The result has been lack of awareness amounting to ignorance and indifference at the Primary level cooperatives.

In order to surmount these handicaps the member education programme has to be developed in a more integrated way so that the functional cooperative institutions at different levels are also involved in the planning and implementation of various cooperative programmes. The programme has also to be made an inevitable part of the overall cooperative development. In the absence of a sound Cooperative Union at the State level as well as in the regional level, the responsibility of the State to shoulder the entire burden is likely to continue. In the meantime all out efforts would have to be made to reactivate the State Cooperative Union so that services of the Union in the implementation of the Cooperative Education Programmes could be enlisted during the Fifth Plan period although most of the financial burden will have to be borne by the State.

The basic objective of cooperative education may be as follows:-

1. to create an awareness among the people about their social and economic conditions and the value of cooperative action in bringing about an improvement in these conditions.

2. to create an enlightened membership.
3. to ensure steady supply of non-official leaders to man cooperative institutions at different levels.

The absence of a continuous and integrated education programme is bound to make the movement weak, dependent and undemocratic with more chances of exploitation, dishonesty and misuse of funds.

Following programmes are suggested to be implemented during the Fifth Plan period:-

- 1) Member education programme for the
  - (a) prospective members.
  - (b) ordinary members.
  - (c) active or elite members.
  - (d) the Managing Committee Members and office bearers.
- 2) Training of the employees of cooperative Institutions in a phased manner.
- 3) Cooperative Education at the School and College levels.
- 4) Study tours of members, potential members, office bearers and key personnel in the Cooperative Institutions both within the Territory and the mainland
- 5) Cooperative education at block level and adult literacy centre.
- 6) Distribution of Cooperative Literature, booklets, pamphlets and publicity through audio-visual-means like filmshows, and slides in the cinema halls et

7) Grants-in-aid to the State Cooperative Union to undertake their own programme as well as to implement state plan in this behalf.

8) Cooperative week celebration and award of certificates, prizes, printing of model bye-laws, and printing of other cooperative literature for distribution among the interested people.

It is felt that the Cooperative Training Centre should be well equipped with necessary staff for providing junior level training for employees of the Cooperative Societies and possibly of the department as well, undertaking member education programme for members, prospective members and office bearers of Co-operative societies. The training proposed to include various aspects of cooperation and allied subjects.

Societies for weaker Sections of the Community.

It is a matter of utmost importance to ensure that the benefits of economic development should reach more and more to the masses and particularly to the weaker sections of the community. In order to enlarge employment and income opportunities in the rural areas, it would be necessary to take up the programme of milk supply, poultry, fishing and labour cooperative etc. among the weaker sections.

Labour cooperatives will need our special attention so that the surplus labour and the seasonal surplus in agricultural labour can be gainfully employed. As is evident these cooperative with their limited resources cannot stand in open and unhealthy

competition with private enterprisers. Work upto a certain approved limit should be reserved for labour cooperatives so that contracts upto that limit could be awarded to deserving labour cooperatives without call of tender. Govt. being the biggest work-awarding agency in this Territory, a policy decision in the matter will need to be taken to strengthen labour cooperatives by extending to them concessions and assistance and thereby extend the benefits of better wages and greater income opportunities to the working Class. It is also felt that if the existing rules stand in the way, the need to revise and liberalise the rules should be considered. Firewood being in great demand particularly in the urban area at Port Blair, it was considered that organisation of Cooperatives for supply of firewood should also be taken up on a cooperative basis.

Shell fishing is another sector which deserves the attention and unless the shell divers are ensured of allotment of suitable shell fishing zones, the benefits of collective action cannot be extended to this section of the community. The licensing rules and policy for grant of shell fishing licence may have to be suitably liberalised to enable shell divers to feel the benefits of collective action by getting them out of the clutches of traders and contractors. It is felt that one or two shell fishing zones could be allotted exclusively to co-operatives.

With a view to enabling the farmers to augment their income, promotion of poultry keeping will have



to be encouraged. All financial assistance to individuals under various Govt. Programmes should be routed through cooperatives as a general policy. At this stage, however it was felt that individual requirements should be met by providing credit through the respective village societies.

If weaker sections are to derive the benefits of cooperation special treatment will have to be extended to them instead of leaving them to a shrewd, well organised private opposition. The plan programmes will have to be moulded accordingly.

Dairy Farming, Transport and Housing.

The existing primary milk cooperatives have almost failed in either surviving or meeting the demand for quality milk in the urban areas, mainly at Port Blair. The demand for milk has been rising day by day in and around the biggest growth centre i.e., Port Blair due to quick and continuous rise in population here. Present supply for milk is already lagging behind the supply of standard milk but has to catch up with the increasing demand over the coming years. It is, therefore, proposed that a cooperative Dairy Farm may be organised and set up preferably in the outskirts of the Port Blair township. Suitable land including grazing land will have to be allotted by the Administration to the proposed Farm. The Dairy will undertake supply of milk catering mainly to the demand of the Port Blair Municipality area at reasonable rates and will also undertake processing of milk to butter, ghee etc. when in surplus. Presently

there is no unit in this Union Territory manufacturing Khoya, butter or ghee. Therefore a multipurpose Dairy Farm when set up on cooperative basis will not only survive as an economically viable unit, but also will be able to provide job opportunities to some extent besides being production oriented. The rising tendency of price of milk and milk products will also be checked. The administration is of the view that despite the possibility of a Dairy covering up in the public sector, a Cooperative Dairy will have justification to function as an economically viable unit. The growth in population, poor quality of milch cattle locally available, demand-concerted effect for augmenting milk production. A Dairy Project in the Cooperative Sector is also expected to give a steady income to the agricultural families in the rural area who are otherwise obliged to content with one main crop in a year.

Transport Cooperatives.

This Territory is basically handicapped due to inadequate transportation facilities both roadway and waterway. With the implementation of the various schemes under Transport and Communications there will be a dynamic change in the communication net work. The change in the transport system will open up fresh doors for movement of motor vehicles and augment the scope of motor transport business. The demand for carriers in the entire Andaman region will increase and they are most likely to replace the present hazardous system of water transport.

A motor Transport Cooperative Society is, therefore,

proposed to be organised with a unit at Diglipur and assisted in a phased manner during the Fifth Plan period.

Car Nicobar Island has been excellently linked with a circular road of 49 km. The extension and other link roads have also been provided. The roads of Car Nicobar are most suitable for plying of three Wheeler Auto Rickshaws which are cheaper, comfortable and well within the means of the people of that area. It is proposed to organise a transport Cooperative there consisting of Autos in the beginning. Necessary assistance etc., are also proposed to be given to the society in a phased manner during the Fifth Plan Period.

The Scheme will aim at service to the common people at the same time giving employment opportunities, reducing regional imbalance and ensuring more equitable distribution of income. This will also solve inadequate carriage facilities in Andaman area to a great extent and will provide better and more frequent availability of cheap and comfortable transportation services with the Car Nicobarese.

#### Co-operative Housing.

As elsewhere, the problem of housing exists in this Territory also. There are large numbers of Govt. employees and others who intend to settle here permanently. The scope of availability of rented accommodation is also very much limited. The problem of housing is thus gradually raising its head and it is here that we should tackle the problem on a cooperative basis. Although the problem is too big for a solution, a beginning in that

direction can surely be made. The Cooperative agency has several distinct advantages over other agencies, particularly for providing houses within the reach of the middle income group. The members can pool their small resources and on their joint strength raise the necessary finance for construction of houses and for providing common facilities for the colony.

The number of such colonies that can be formed, would, however, depend on the availability of suitable land say within not more than 10 KM of Port Blair. It appears that Garacharma and Dollygunj area would be a good location for such a colony. During the Fifth Plan period a phased programme for the establishment of such colonies could be worked out subject to availability of land, supervisory staff and the required finance.

Mainly two types of societies are predominant with modification in the structure and purpose to suit local conditions. The essential features of the first type is that it merely advances loan to members to build houses. In the second category the societies actually build houses for sale or renting out to their members. In this Territory to start with we may adopt the second system so that the Society may build the house and rent/sell them out to its members.

The programme for formation of housing colonies would have to be formulated on the lines indicated above.

#### Strengthening of the Department.

Although the Cooperative movement is a movement of the people, the participation by Govt. is needless

to be emphasised in view of the present condition and growth. The Cooperative Deptt. is the pivot on which the entire movement is rotating. Unless and until the Cooperative Deptt. is reorganised on sound lines, the implementation of various Schemes envisaged in the Fifth Plan will become ineffective or rather impossible.

The Cooperative movement in this Territory has expanded considerably during the past years and as a result the volume of work and functions have expanded simultaneously. The present set up and future programme necessitate to a larger extent to recognise the department on a proper manner based on genuine requirements.

At present we have got more than 200 societies. By the end of the Fifth Plan the number of Societies will considerably increase. A Number of Societies borne in the list of registered societies are dormant or in defunct stages and need special attention. One of the main factors for the failure of those Societies is the lack of adequate supervisory staff. It would have been possible to exercise better and closer supervision with adequate supervisory staff.

The Cooperative Deptt. should be strong enough to guide, control and administer the movement to strengthen the cooperative movement. This precipitates the need for a thorough overhauling of the Cooperative Deptt. of this Territory during the Fifth Plan. The lines on which this is proposed to be done are indicated below.

The Registrar of Cooperative Societies occupies a crucial position in the Cooperative system. In order to carry out the multifarious functions of this post and to man the department on sound lines, an officer of DANI cadre with high seniority may be appointed as Registrar of Cooperative Societies for this Territory, who will be the head of the Cooperative Department.

It is necessary to divide the entire Territory of Andaman and Nicobar Islands, into 3 Cooperative Zones so as to administer the policies and programmes in a speedy and efficient manner. An Assistant Registrar will be placed in charge of each zone. The Assistant Registrar will be responsible to the Deputy Registrar who will be the technical and functional adviser to the Registrar and also will be the liaison officer between the Registrar and the Assistant Registrars. The Deputy Registrar will exercise full control over the working of all the zones.

The audit wing of the Department also needs considerable change in its staffing pattern to cope with the increased activities in the field of Cooperation.

At the top, there should be a Chief Audit Officer to exercise control and supervision on the work of Audit Officers who will be working in the 3 Zones as in the case of Assistant Registrar. This will ensure audit in an efficient and expected manner.

As in the case of Cooperative Zones for Administrative lines, the same cooperative Zones will form the Zones for audit purpose also. Audit Officers in

Zones will be in charge of the Zones of the respective jurisdiction. The Zonal Audit Officer will be assisted by the required strength of Auditors and will be responsible for audit and pursue of actions thereon. This will also facilitate proper supervision and control over the work in relation to audit and achieve the expected results of Audit.

For collection and maintenance of upto date statistical data relating to the societies and the department, there needs to be Statistical wing in the department headed by an officer of the rank of Asstt. Registrar assisted by a Statistical Investigator or assistant.

Deputation to cooperatives.

The Fifth Plan period will be a stage of drastic step forward with new and bigger societies like housing, dairy, farming etc. which will necessitate senior and experienced personnel from our department on deputation to effectively man the key position atleast in the initial stage. Therefore in such institutions deputation from among the Staff of the Department will be a common feature during and after Plan period. As such adequate provision should be made in the staff pattern to enable the Deptt. to effect such deputation as and when required. It is anticipated that the following member of officers will have to be placed on deputation to various major Cooperatives.

Assistant Registrar of Cooperative Societies/Audit Officers.	-	4
Inspector/Auditors	-	7

Training Reserves.

This Department is required to be equipped with qualified trained staff. It is, therefore, necessary to impart training to the untrained staff of the department in phased programmes. As such every year atleast two Inspectors, two Auditors, one Assistant Registrar, one Audit Officer, one Accounts Supervisor and also the Statistical Investigator would be required to be deputed for necessary training in the Training Institutions of mainland. Therefore required reserve of staff for facilitating such training to the staff is of prima facie importance.

Leave Reserves

Provision is also required to be made for leave reserve as Staff of different categories are likely to be on leave and so the temporary vacancies should be filled up to ensure progress and implementation of various schemes.

Broad outline of the major schemes under the 5th Plan.

The major Schemes proposed to be included under the 5th Plan in the Cooperative Sector are indicated as hereunder:-

1. Development of Agricultural Credit Cooperatives.

The objectives of the Scheme are to (a) ensure geographical coverage of the uncovered and new areas (b) effect familywise coverage in a phased manner (c) strengthening the cooperative credit structure by re-organisation and revitalisation of societies (d) provide assistance by way of share capital



participation, grant of managerial subsidy and special bad debt reserves (e) depute qualified staff to desirous institutions.

To ensure proper implementation of the scheme the departmental supervisory machinery will have to be strengthened by appointing functional assistants to the Registrar and also other subordinate staff to intensify field supervision. Group Secretaries for service Societies also may have to be appointed wherever necessary.

2. Cooperative Banking

The scheme would provide for assistance towards managerial costs, branch expansion programmes, agrl. credit stabilisation fund, bad debt reserves and share capital contribution. The department may also have to provide for suitable staff to man the key posts in the Bank. Funds also may have to be provided for the construction of the Bank building and its branches where necessary.

3. Development of Cooperatives for Weaker sections.

The scheme would aim at providing suitable incentives and assistance to the weaker sections to take up ancillary activities and to open up income opportunities for them. Poultry, goat-breeding, labour contract, fishery, shell fishing, fuel supply etc. could be brought under the purview of the scheme.

4. Cooperative Dairy Farming.

The object is to set up a small Dairy Farm to improve the milk of standard quality. Assistance towards capital investments, plants and machinery, purchase of

milch cattle, managerial expenses for appointment of technical and administrative staff will have to be provided for. Suitable site together with sufficient grazing land will be required to be allotted by the Administration.

5. Cooperative Education, Training and Publicity.

The schemes will aim at providing cooperative education to members and potential members of cooperative societies, training to employees of various cooperative institutions and undertaking measures for publicity and propoganda on cooperation. This will involve necessary financial assistance for establishment of a training centre with mobile units to conduct training programmes in rural areas. The department will also be required to appoint necessary staff to conduct the entire training programme.

6. Cooperative Farming.

The scheme would seek to develop the various types of farming societies and encourage the growth of collective farming by providing assistance towards construction of sheds, purchase of tools and implements, managerial expenses etc.

7. Strengthening of Industrial Workers Cooperative Stores.

These stores cater to the need of industrial workers. There is no restriction to sales to non-members. These Stores, therefore, contribute equally to other stores in keeping a check on the market prices. These stores were formed in accordance with the provisions of the Industrial Trade Resolution 1962. Besides

providing facilities like accommodation and transport which is to be extended by the Departments concerned, provision for adequate working capital loans, share capital contribution and managerial subsidy would also have to be made. Special approval of the Government of India may be obtained for the purpose.

8. Development of Consumers Coop. and Revitalisation of Primary Coop. Stores.

The Primary Stores form the village level their in the Consumers movement. Unless these stores can function effectively on sound lines the benefits of the movement cannot reach the commonman in the villages. Besides providing assistance to the Wholesale Stores the scheme would also aim at providing adequate assistance to potentially viable societies which have suffered a set back but have streamlined their activities and drawn up a revised programme for implementation. The element of loss should not be a plea for debarring the Societies from further necessary aid.

9. Development of Cooperative Marketing:

The Scheme is aimed to provide for the establishment of State Level Federation and strengthening the Marketing Cooperatives so as to enable them to take up marketing operations which will include export of agriculture produce to the mainland through the National and the State Federation on the mainland. The marketing structure will require adequate working capital, storage accommodation, and staff for which assistance will have to be provided. The construction of a cold storage can

be taken up with financial assistance from the NCDS. Qualified staff on deputation from the department may also have to be provided. During the 4th Plan there was no separate Scheme for marketing cooperatives.

10. Housing Cooperatives.

This will be a new venture which may include a Scheme similar to that recently taken up by the Delhi Development Authority in respect of persons retiring within next 3-5 years and the intention is to set up a few cooperative housing colonies which could be sold/rented out to the members. The necessary funds for construction of houses may be made available by the Bank LIC. The Scheme will also include provision of staff for implementation of the scheme. Allotment of suitable land for establishment of the colony in the vicinity of the urban areas with development facilities would have to be made by the Administration.

11. Transport Cooperatives.

This will also be a new scheme aimed to extend the cooperative sphere of activity in this sector. Initially one transport cooperative with an unit at Diglipur and one Auto-rickshaw cooperative at Car Nicobar will be taken up. The financial involvement can be met from the Banks on the mortgage of the vehicle.

12. Strengthening of the Cooperative Department.

In order to successfully implement the Schemes, it is necessary that the department is sufficiently strengthened to take up the responsibility. It is therefore proposed to strengthen the Coop. Deptt. suitably by appointing, Dy.Registrar, Asstt. Registrars, Asstt. Statistical Officer and other staff.

The total outlay on these Schemes is Rs.100.00 Lakhs for the Fifth Plan.

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## COMMUNITY DEVELOPMENT

Community Development Programme in the Andaman and Nicobar Islands started when the South Andaman Block of the NES pattern was inaugurated on 14.11.1957. At present the entire Territory is covered by 5 Community Development Blocks. The jurisdiction of these Blocks and the stages in which they are functioning are as follows:-

Sl No.	Name of Blocks	Jurisdiction	Stage in which functioning	Date on which the Block will reach Post Stage II
1.	South Andaman	South Andaman Tahsil	Post Stage II with effect from 1.8.1969.	-
2.	Middle Andaman	Middle Andaman Tahsil & part of Mayabundar Tahsil.	Stage II	1.10.1974.
3.	North Andaman	North Andaman Tahsil & part of Mayabundar Tahsil.	Stage II	1.4.1976.
4.	Car Nicobar	Car Nicobar Tahsil.	Post Stage II with effect from 1.10.1970.	-
5.	Nancowry	Nancowry Tahsil	Stage II	1.10.1976.

2. The Post Stage II Blocks are provided funds from the Non-Plan Budget. Thus during the Fifth Plan, South Andaman and Car Nicobar Blocks will continue to draw their funds from the Non-Plan Budget for the entire period. The Middle Andaman Block would be under Plan for 6 months. The North Andaman Block would be for 2 years and Nancowry Block for 2½ years. For the rest of the period, these Blocks will be under Non-Plan.

3. Little Andaman and Great Nicobar Islands fall in the jurisdiction of South Andaman and Nancowrie Blocks respectively. The Rehabilitation Department is carrying out large-scale Schemes of Rehabilitation and settlement in these two islands. According to the information received from that Department, the number of families to be inducted by the end of 4th Plan in Little Andaman would be 277. The anticipated induction in Fifth Plan in Little Andaman, is 700 families. In addition, 300 families of Nicobareses from Car Nicobar will be settled in the southern portion of Little Andaman. A lot of developmental activities are being undertaken in the island. This itself requires the presence of a large number of people. Industrial and commercial activities would also grow along with these developments. Thus, by the end of the Fifth Plan, we may expect a population of about 10,000 in Little Andaman. In Campbell Bay, the number of families by the end of the Fifth Plan will be 700. There are large governmental activities for making jetties, roads and other infrastructure in these islands. There is some aboriginal tribal population. We may similarly expect a population of about 10,000 in Great Nicobar island also by the end of Fifth Plan. Hut Bay which is presently the Headquarters of Little Andaman is at a distance of 62 miles from Port Blair, and Campbell Bay (Great Nicobar) is at a distance of 80 miles from Nancowry. With the large scale settlement that is contemplated in these two Islands, it will be necessary to provide them with Community Development coverage. This will not be

possible if these islands are kept under South Andaman and Nancowry Blocks. Pre-Extension Blocks may be given in each of these islands with effect from 1.4.1976, and these Blocks may be started in Stage I with effect from 1.4.1977.

4. According to the Schematic Budget for the Community Development Blocks, the staffing pattern for a Block during the second Stage is as follows:-

(1) Block Development Officer	...	1
(2) Extension Officers		
(Viz. 1 each for Agriculture, Animal Husbandry, Cooperation, Panchayats, Rural Industries, Rural Engineering, Social Education(M), Social Education(F)	...	8
(3) Gram Sevaks	...	10
(4) Gram Sevikas	...	2
(5) Progress Assistant	...	1
(6) Accountant-cum-Storekeeper	...	1
(7) Senior Clerk	...	1
(8) Cashier	...	1
(9) Typist	...	1
(10) Class IV Employees	...	4

The same pattern is to be continued in the Post Stage II even though the entire funds may come from Non-Plan. In these islands, the Community Development Block have not been provided with staff as per the staffing pattern. Some times even the Block Development Officer is not a whole-time Officer, and Assistant

Commissioner or any other Officer is required to look after the functions of the Block Development Officer in addition to his other duties. Instead of 8 Extension Officers, there are only 1 or 2 Extension Officers provided in the Block. These may be Panchayat or Social Education (Male), and Social Education (Female). Inspectors or officials of equivalent status of the various development Departments have been designated as ex-officio Extension Officers. This arrangement does not work at all satisfactorily. In certain Blocks, instead of Gram Sevaks, Agricultural Demonstrators of the Agriculture Department have been provided. Though they are also required to perform duties other than Agriculture, in actual practice, this arrangement also does not work satisfactorily. It is, therefore, necessary that the Blocks may be provided with the extension staff of various types as given in the staffing pattern.

5. The Community Development Block is expected to serve as an extension agency. It has also to coordinate the development programmes in the various fields in the rural areas and it has to make its own effort for the development. Normally the activities of the various development Departments engaged in the rural areas are to be channellised through Block. In these islands, however, there is not much distance between the rural areas and the various Directorates and other Development Departments. The Development Departments attempt to approach the villagers directly through their own agency. The



Block is doing also the same function. Very often, similar Schemes are provided in the development Departments as well as in the Block. This also means that two agencies in each field are trying to cover the rural areas and the coverage of each becomes thinner. It is, therefore, felt that the Departments and the C.D. Agency should have their roles defined. The Block should adequately provide the extension agency. The in-puts should be made available by the concerned Departments which should be channellised through the Block. The Departments should also provide technical guidance. They should also carry out research. The Departments should not try to provide the extension agency. These steps would ensure that the felt needs of the villagers are focused through their elected representatives at the Block level. The extension staff is fully charged with the responsibility of bringing home to the villagers the developments in various fields and inducing them to adopt to improve techniques without wasting efforts in duplication of Schemes under more than one agency.

6. Another important question is with regard to training of the various functionaries in the Block. The Block Development Officer, the Extension Officers, and Gram Sevaks are mostly untrained. Even where they have received some training, it has been so long back that they have no idea of the latest developments in their respective fields as also of the various extension aids that have been evolved in the country. There is no training School for the extension staff in these islands.

A suitable training School is to be opened in these islands in the Fifth Plan to train extension staff and to provide them refresher course from time to time. The school should also include training of the various functionaries - official and non-official engaged in the Panchayat Raj Institution as also in the field of Cooperation.

7. The expenditure in Nancowry Block has not been able to pick largely because of the fact that the means of communication are very poor. There is no ferry service from the Headquarters to the various islands for the extension staff to visit the area. Even inside the island, there are hardly any roads. The development effort of Community Development Block in Nancowry can improve considerably if a Motor vessel is provided. A vessel has to be stationed at Kamorta which can ply from the headquarters to various islands according to the set schedule so that not only the extension staff, but the local inhabitants can also take advantage. Similarly, roads have to be constructed to open up the areas.

GRAM PANCHAYATS

Panchayats have been established in the Andaman group of Islands only. In the Nicobar group of Islands, the tribals elect their own village head called the Captains, and no normal Panchayats have been constituted there. The Andaman and Nicobar Islands (Gram Panchayats) Regulation 1961 and the rules framed thereunder govern the working of Panchayats. 36 Gram Panchayats ~~and 36 Gram Panchayats~~ and 36 Nyaya Panchayats are already functioning. 2 more Panchayats have been established at Harinagar and Basantipur in Rangat Block area and 1 at Neil Island in South Andaman Block. With this the break-up of the Panchayats will be as follows:-

(1) C.D.Block, Diglipur	..	10
(2) C.D.Block, Rangat	..	13
(3) C.D.Block, South Andaman	..	<u>16</u>
Total:		39

In due course Panchayats will have to be given in Little Andaman and in Great Nicobar. The number of Panchayats that will be necessary in these two islands, however, cannot be indicated at this stage as that would depend upon how many villages are ultimately established.

2. A Panchayat has the following functions:-

- (1) Sanitation, conservancy, disposal of carcasses of dead animals.
- (2) Removal of rubbish and keeping the village in clean condition.
- (3) Maternity and child welfare
- (4) Destruction of stray and ownerless dogs.

- (5) Supply of water for domestic use and for cattle.
- (6) Construction and maintenance of public latrines.
- (7) Construction, repair and maintenance of village roads, drains, bridges etc.
- (8) Lighting of village and planting of trees.
- (9) Establishment and maintenance of markets.
- (10) The spread, supervision and improvement of education.
- (11) The Establishment of parks, akhadas, libraries recreation centres for promotion of arts and culture.
- (12) Watch and ward of the village, and of the crops therein.
- (13) Prevention of fire, rendering assistance in extinguishing fires and protecting life and property when fire occurs.
- (14) The numbering of premises.
- (15) The control of cattle pounds.
- (16) Establishment, maintenance and regulation of fairs.
- (17) Preparation of plans for the development of village.
- (18) Collection of land revenue.
- (19) Relief to the crippled and the destitute.
- (20) Propagation of family planning.
- (21) Organising voluntary labour for community works.
- (22) Opening of fair price shops.
- (23) Farming and implementing programmes for increased Agricultural production.
- (24) Improvement of agriculture and establishment of model agricultural farms.
- (25) Promotion of cooperative farming.
- (26) Sinking of wells, and minor irrigation works.

- (27) Improvement of cattle breeding and general care of livestock.
- (28) Afforestation of waste land to prevent erosion.

3. The financial position of the Panchayats is not good. Grant-in-aid is given by Government for building up of C.D. assets, construction of Panchayat-ghars and for meeting pay and allowances of part-time Secretaries of Gram Panchayats. During the Fourth Plan, provision was made for grant-in-aid of Rs.2,61,000/- to Panchayats.

The year-wise allocation of expenditure has been as follows:-

	<u>1969-70</u>	<u>1970-71</u>	<u>1971-72</u>	<u>1972-73</u>	<u>1973-74</u>
Approved outlay	40,000/-	40,000/-	60,000/-	60,000/-	61,000/-
Sanctioned	40,000/-	40,000/-	40,000/-	-	-
Amount spent.	40,000/-	40,000/-	40,000/-	-	-

4. The Panchayats can levy the following taxes:-
- (1) A tax on the owners or occupiers of buildings.
  - (2) A tax on professions, trades, callings and employment.
  - (3) A tax on vehicles other than mechanically propelled vehicles kept within the limits of the Gram.
  - (4) A tax on sale of cattle within the limits of the Gram.
  - (5) A theatre or show tax on entertainments and amusements.
  - (6) A lighting tax.
  - (7) A drainage tax.
  - (8) Octroi.
  - (9) Fees for sale of goods in markets, melas, fairs, and festivals.

- (10) Fee for grazing of cattle in grazing lands under the management of Panchayat.
- (11) Fee for providing the watch and ward of crops in the Gram.
- (12) Licence fee for plying of public ferry.

In actual practice the Panchayats have been most reluctant to impose taxes. It has, therefore, been considered necessary that the Panchayats may be asked to levy certain taxes compulsorily. It is proposed to amend the Panchayats Regulation to provide for the following compulsory taxes:-

- (a) House tax:- Houses and buildings owned by persons at the rate of Re.1/- for hut, Rs.2/- for a mud plaster structure and Rs.5/- for a pucca house.
- (b) Profession tax:- On persons practising any profession, or art, or carrying on any trade or calling within the area of Gram Sabha, at the rate of Rs.6/- per annum.
- (c) Bullock Cart Tax:- Tax on the owner thereof kept within the area of Gram Sabha at the rate of Rs.5/- per bullock cart per annum.
- (d) Lighting tax:- At a rate of Re.1/- per family per annum in the village where street light has been provided.
- (e) Water tax:- At a rate of Rs.2/- per family per annum where water facilities have been provided.
- (f) Taxes on shops:- At the rate of:-
  - (i) General merchantise shop - Rs.24/- per annum.
  - (ii) Hotels - Rs.18/- per annum.
  - (iii) Other shops - Rs. 6/- per annum.
- (g) Taxes on sale of cattle:- At a rate of 1% of the total value in respect of animals sold within the limits of the Gram Sabha.

Adequate financial assistance should be provided to the Gram Panchayats to enable them to carry out

their functions properly. The basis for the grant should also be modified in such a manner that the Panchayats may be induced to raise their own resources by adequate tax effort. A land revenue grant upto 25% of the total collection of revenue made from the villagers within the jurisdiction of the Panchayats may be given to the concerned Panchayat every year bases on actual collection made in the previous revenue year. This should go to meet the establishment expenditure. An incentive grant equal to income derived by a Gram Panchayat in the previous financial year from taxes or fees levied by it subject to a certain maximum may also be given. It is expected that this would induce the Panchayat to raise its resources by levying taxes. Adequate funds may be provided for this purpose. There should also be a provision for special grants to Panchayats depending on their needs, in those cases where the Panchayats cannot get sufficient funds in terms of the revenue grant or incentive grant because of the sparse population, small cultivated area and a limited scope for raising resources internally. A scheme should also be provided for giving loans to Panchayats for remunerative assets like markets, plantations, etc. This would ultimately reduce the dependance of the Panchayats on grant-in-aid.

5. There is no cadre of Panchayat Secretaries in these islands. At present a part-time Secretary is provided to the Panchayat. Normally this is a teacher working in the area. He gets a remuneration of Rs. 20/- per month for this purpose. The remuneration is not attractive. The teachers are also frequently transferred with the result that the Panchayat does not get the continued assistance of a Secretary. These teachers are also not trained to carry out their duties as Panchayat Secretaries. It is proposed that the number of V.L.Ws should be increased so that a Village Level Worker has to look after 2 Panchayats. He may also be entrusted with the duty of Panchayat Secretary for these Panchayats. The V.L.Ws may be trained in the functioning of the Panchayati Raj institution. They will then be in a position to give continued assistance to the Panchayats.

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6. The existing Regulation provides for only one-tier of Panchayati-Raj Institution, viz. Panchayats at the village level. There are no Panchayat Samities and there is no Zilla Parishad. This being a single District Union Territory, the idea of a Zila Parishad as an Institution will not be workable. However, Panchayat Samities could be introduced at the Block level. Even now Block Development Committees have all Panchayat Pradhans as Members. Appropriate legislation will have to be passed for the statutory creation of the Panchayat Samity.

Crash Scheme for Rural Employment:-

Crash Scheme for Rural Employment was introduced in the Country during the year 1971-72 as a Central Sector Scheme. The two basic objectives of the Scheme are (i) the direct generation of employment through execution of projects which are essentially labour intensive, and (ii) the production of assets of a durable nature in consonance with local development plans so that the all round development of the District is assisted. The Scheme as laid down by the Central Government provided Rs.12.50 lakhs for every District. It was assumed that on an average, there will be 10 C.D. Blocks in a District. Each Block was to get Rs. 1.25 lakhs. An amount of Rs. 1 lakh was intended to generate employment for 100 persons for a period of 10 working months in a year. The remaining amount of Rs. 25,000/- was intended for material costs.

2. The Scheme was taken up in these islands in 1971. The Government had originally provided for Rs. 12.50 lakhs for this District also. There are, however, only 5 C.D. Blocks in these islands. It was not possible to take up the Scheme in the Car Nicobar and Nancowry Blocks as the problem of unemployment among the local inhabitants does not exist. The Scheme was, therefore, taken up in the Blocks of North, Middle and South Andaman. In 1971-72, 41 Schemes were taken up in these three Blocks. An amount of Rs.2,34,042/- was spent during the year generating 55,464 man days for employment. During the year 1972-73, 38 schemes have been formulated in these three Blocks at an outlay of Rs.3,75,000/- 80,165 man days employment are expected to be generated. The Schemes will be continued in these three Blocks in 1973 also.

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3. The Population of C.D. Blocks in these islands is comparatively small. According to 1971 census, North Andaman has a population of 20,527, Middle Andaman has 34,724 and South Andaman has 60,515. Most of the people in the rural areas are old inhabitants and settlers who have been given land by the Administration. The families where no one is employed hardly exist. There is a long rainy season in these islands and in fact, fair weather may be available only for 4 or 5 months in a year. The rural population has also to get on with the harvesting of their crops during this period. Severity of unemployment is not large in these islands. The present wage rate is also high. A minimum of Rs. 133/- per month is available to an un-skilled labour working under P.W.D., Forest, and other Departments in rural areas. Under the Crash Scheme for Rural Unemployment not more than Rs. 100/- can be given to a worker as wage. Sufficiently large number of people are, therefore, not available at a given place to take up project in the Crash Scheme.

4. The Guide-lines for Crash Scheme for Rural Employment gives the following illustrative list of projects which may be taken up under the Crash Scheme. The projects should, however, be essentially labour intensive and should promote the development of the District:-

- (a) Road building.
- (b) Reclamation and development of land.
- (c) Drainage, flood protection and anti-water-logging.
- (d) Water conservation and ground water recharging.
- (e) Minor irrigation.
- (f) Soil Conservation.
- (g) Afforestation.
- (h) Construction of additional class-rooms for Primary School buildings
- (i) Special repairs - as distinguished from ordinary day to day maintenance, repairs of existing assets with a view to making them durable and useful.

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5. There is a considerable back log of rural roads which can be taken up under the Crash Programme. There is also some scope for taking up of minor irrigation. There is a considerable scope also for Schemes of soil conservation. Special repairs to existing roads need to be carried out, particularly in South Andaman where some rural roads were constructed with convict labour during the Penal Settlement, but need to be taken up to make them durable and useful. A large number of projects have been taken up to clear grazing lands in Panchayats under the Crash Schemes. This programme can be continued in the Fifth Plan also.

6. Construction of additional class-rooms to Primary School buildings can be taken up in a big way. There are a large number of Schools, the buildings of which need to be extended. There is one great difficulty, however, i.e. with regard to the proportion to be kept between labour and the material components. It has been ascertained that if extension of School building is to be taken up under Crash Programme, the proportion between labour and material components in these islands will be 10:90. The guide-lines provide for a maximum of 40% as material components. Relaxation of this condition, therefore, is necessary. The matter has already been taken up with the Government of India. In the Scheme of the Government of India, there is a provision that in cases where the proportion of 40% as material cost does not prove adequate for ensuring durability of work, the deficit will have to be made good by the State Government from their own resources. In case of a Union Territory, all the funds are controlled by the Central Government. Therefore, the Central Government itself will have to permit the deficit being made good from the other resources placed at the disposal of the Union Territory. If this is permitted, it will be possible to relieve the shortage of resources as also to provide additional employment directly and indirectly.

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7. According to the Scheme of the Government, care should be taken to see that the project formulated for execution are not too small. Multiplicity of small projects is attended by the danger that supervision over their execution is likely to lax and also by the risk that the money invested in them may prove wasteful, for small projects cannot produce useful and durable results. In these Islands, because of the scattered villages and the means of communication being poor, as also for the reason that there is no surfeit of unemployed labourers seeking jobs in rural areas, it is not possible to take up big projects. A project has to be small enough so that labour is available nearly in the limited working season and it can be completed in one or at the maximum two years. This difficulty will continue in the Fifth Plan period and the projects will necessarily have to be small.

8. The question of the agency responsible for maintenance of assets and making adequate financial provision for their maintenance need to be examined in greater detail. Crash Scheme for Rural Employment is a plan Scheme and it is not possible to make a provision for normal maintenance under the plan Scheme. The "Guidelines" make a mention of "Special repairs - as distinguished from ordinary day-to-day, maintenance repairs - of existing assets with a view to making them durable and useful". It would thus appear that ordinary repairs have to be done from Non-Plan funds. There are no funds in the Block budget for the maintenance, repair of the works undertaken under the Crash Schemes for Rural Employment. Further, if funds are provided every year by the Government of India for Crash Schemes for Rural Employment Schemes, the number of works which need maintenance would increase cumulatively over a few years. The arrangements, therefore, that may be thought of must take this long term point into consideration. It is suggested that funds for maintenance of Schemes under Crash Schemes for Rural Employment may be provided for in the normal P.W.D. budget. The P.W.D. can then itself attend to the maintenance. The other alternative would be that the P.W.D. places some funds at the disposal of the Blocks for the maintenance of the works, and an adequate agency is

created in the Block for maintenance of these works. There is no departure from the normal policy in this case as the Department concerned with the rural development can channelise funds through the Community Development Blocks.

9. An amount of Rs. 4 lakhs is provided for implementation of the Crash Scheme for rural employment in the C.D. Blocks of North, Middle and South Andamans during the year 1972-73. In addition, an amount of Rs. 90,000/- is also provided under the Special Employment Scheme for these three Blocks. Over and above this, the Blocks have to carry out their normal construction programmes. The average amount of money that is provided for in the Blocks under the various Heads comes to over Rupees two lakhs. One Extension Officer (Rural Engineering) has been provided to every Block. This was done as a part of the Schematic pattern of the C.D. Blocks before the crash Schemes for Rural Employment and the Special Scheme were thought of. The Extension Officer (Rural Engineering) has also been entrusted with the execution of these two latter Schemes in the Block. Difficulties are being experienced by the Block Development Officers regarding the supervision of the various construction works undertaken in their respective Blocks. In the A.P.W.D., a Section Officer is required to attend to works worth about one lakh of Rupees, if the works are spread over and to works of a maximum of Rs. 2 lakhs only if they are of a concentrated nature like putting up of building. The Extension Officer (Rural Engineering) who is actually a Section Officer of the A.P.W.D. working in the Block is required to attend to various Schemes spread over the entire Block. Means of communications are often poor and it is difficult for him to supervise his works scattered over different areas. Every Panchayat insists that it should get a fair share of the various Schemes. Labour has also to be drawn only from the area where the work is to be taken up. The number of Schemes in each Block, therefore, becomes large. In the interest, therefore, of proper supervision of the large number of works, it is necessary that one additional Extension Officer may be provided in each of the three Blocks of North, Middle and South Andamans.

## P O W E R

Availability of adequate power is one of the most essential pre-requisites for the development of any economy. It is the increasing use of electrical energy which will determine in more than one way the growth of various vital sectors of the nation's economy viz. industry, agriculture etc.

The demand for power in this Territory has been steadily increasing on account of the various development programmes that have been taking place and also owing to the increase in population.

At the time of re-occupation there was a D.C. Power Station functioning in Port Blair. In 1951 the D.C. Power Station was closed down and a A.C. Power House with 2 steam setsof 550 KW each was set up at Chatham Island. The requirement of power at Port Blair was being met from this Power Station and it was only in 1961 that a 330 KW diesel generating set (Deutz) was added. The capacity of Chatham Power Station was further augmented by adding one 440 KW Skoda Diesel Generating set 1969. The transmission system in Port Blair was also extended to cover up the outlying areas upto Garacharma through a 6.6 KV net work 15 KM in length and with 13 sub-stations.

In addition to the above, some progress was made in Middle and North Andaman and Southern group of Islands. In the Middle and North Andaman group of islands, Bangat and Mayabunder were electrified in 1965, while Diglipur was electrified in 1966 by providing a 3 x 24 KW diesel generating station at each place.

In Southern group of islands, the power supply at Car Nicobar was improved by establishing 3 x 24 KW diesel generating station in 1965. Earlier the power supply was being made available from some old small sets. In addition Biglapathy and Mancowrie were electrified in 1967 by establishing a small power station at each place.

The Fourth Plan included four schemes under Power with the ultimate object of generation of power to the extent of 4395 KW (installed capacity). The various schemes envisaged electrification of various inhabited islands. The accent

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however was on generation of power mostly for domestic use.

Approach to the Fifth Plan:

Large scale industrialisation is envisaged in the Fifth Plan. The population of the islands is also increasing steadily. New areas are being opened up for settlement. All these have precipitated an increase in the demand for generation of more power. It has however not been possible to accurately assess the projected requirement of power during the Fifth Plan.

Such an assessment will perhaps be possible only if the development programmes in the various sectors, industrial policy and the pattern of rehabilitation and settlement take final shape. To that extent the schemes under power should remain flexible so as to adjust themselves to the changing condition.

Broad outline of the schemes under power for the Fifth Plan

Certain schemes are already under consideration of the C.W.P.C. to meet the growing demands of these Islands.

These are:-

- i) Establishment of Central power station at Rangat Bay and Transmission line net work connecting Rangat, Hayabunder, Bakultala and other villages enroute to meet the demands of Middle and North Andaman Islands.
- ii) Construction of a 33 KV transmission line from Port Blair to Wimberlygunj feeding various villages between Port Blair and Wimberlygunj.

The demand is increasing day by day, the power at present available is inadequate and we must have a long term plan to meet the growing demand during Fifth Plan and onwards. C.W.P.C. are already seized of the problems and also exploring the possibility of establishing a 2 x 3 MW steam generating station at Port Blair.

However, the new schemes of 2 x 3 MW steam station envisaged under this plan would take about 5/6 years for completion. But our immediate problem is to find additional generating capacity within the shortest possible period to meet the existing demands and those anticipated during next five to six years by which time the proposed steam station would be likely to come up. The action has already been initiated for procuring 3 x 1060 KW second hand sets from Gujarat Electricity Board. If the Plan goes through

this proposal would be implemented by the end of 1973-74 and meet our requirement during Fifth Plan period. A second hand steam set of 550 KW capacity has also been procured from Haryana State Electricity Board and likely to be commissioned next year.

As the power is most essential for development of all sectors, the Fifth Plan must provide adequate scope for meeting the demands for development for all the other sectors and also to increase the standard of living of the people.

Accordingly the programme for Fifth Plan would be as follows:-

1. Augmentation of generating capacity at Port Blair.
2. Construction of 33 KV line from Port Blair to Wimberlygunj.
3. Establishment of Central Power Station at Rangat Bay.
4. Augmentation of generating capacity in places already electrified.
5. Electrification of more villages in South Andaman and other islands like Little Andaman, Rutland etc.

Thus it would be seen that the programme for the Fifth Plan envisages augmentation of the generating capacity in the places already electrified, extending electricity to new villages, establishing new power stations and electrification of new islands. The details for the Fifth Plan will be worked out after collecting the necessary data from the various sectors of development.

As regards strengthening of the Department to meet the needs of Fifth Plan programme, action has already been initiated to suitably strengthen this Department by creating a new division with 4 sub-Divisions to meet the demand of work for next couple of years. The department would have to ~~xxx~~ be further suitably strengthened in the light of the Fifth Plan programme.

A tentative allocation of Rs. 60.00 lakhs is suggested under 'Power' for the Fifth Plan.

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### INDUSTRIES

The Andaman and Nicobar Islands have very few industrial units in both the large-scale and small-scale sectors. In a territory like these islands, where the agricultural sector contributes very little to the economy of the area and the density of the population is very low, comparisons of contributions of industry to the State income or percentage of the working force engaged in manufacturing in the islands and in the mainland will have <sup>no</sup> ~~a~~ significance. The comparative isolation of the territory and the small local population are the factors which have hampered better and fuller utilisation of the resources of the territory. Very little of finance or entrepreneurship is available locally and until recent years not much have been done to attract entrepreneurs and capital from the mainland. Shortage of local labour, both skilled and unskilled, have also handicapped industrial progress. The various development programmes undertaken in the Second, Third and Fourth Plans have tended to create a better atmosphere and some entrepreneurs from the mainland have already been attracted to the islands.

#### The industrial potential

The total employment in the islands in manufacturing in 1961 was 1204 workers according to the census. If compared with the employment reported in registered factories in the year 1961, the above figure is very low. Since the state is the largest employer it is possible that some of the industrial employment has been included in the census figure under other head. It has been estimated that the total industrial employment in the year 1961 was 2294. There were in 1961 only ten registered factories in the territory with a total employment of 1917 workers. The employment in registered factories has been fluctuating in the past five years. In fact the present employment is much lower than employment in registered factories in the year 1957. Employment in small units not registered under the factories act is not available but has been estimated to be only 2000 in the year 1971. The more labour intensive small-scale and cottage industries have not developed very much in the territory due to the shortage of manpower. The state is the largest employer



of industrial labour in the islands providing employment to more than 80 per cent of the workers. There are only three units in the private sector registered under the Factories Act. Even though regional distribution of industrial employment does not have any significance in a small territory where most of the labour have come from the mainland it is interesting to note that more than 85 per cent of the labour are employed in and around Port Blair and Bamboeflat. Consistent with the rich forest resources of the islands wood-based industries provide employment to 1390 workers, or more than 60 per cent of the industrial workers. Service industries like repair of boats, automobiles and tractors form the only other important group of industries in the islands.

Forests form the most important natural wealth of the territory. Unlike in the mainland the commercial timber available far exceeds the demand in the islands, and it will be therefore possible to exploit the forests in Andaman and Nicobar islands for purposes of meeting the requirements of wood and wood products in the country. As per the current working plans of the forest departments, the estimated sustained yield is 1,00,000 tons.

The Andaman forests also contain a large number of species of trees which are not up-to-date considered useful as commercial timber. Such of these species as are not amenable to upgrading by wood seasoning and treatment may be utilised in the manufacture of industrial products like particle-board or chipboard, after ensuring market in the mainland.

Forest based industries provide employment to more than 60% of the industrial workers. The state-owned Chatham saw Mill is the largest industrial undertaking in the islands, and provides employment to 1,163 workers. Smaller saw mills are also located at Betapur, Diglipur and Port Blair. Two large industrial units based on the forest resources of Andaman are located at Port Blair and Bamboeflat.

An important use of wood is as sawn timber in the form of a variety of length and sections. The largest local use for sawn timber is in the construction of building both residential and non-residential, amounting to about 50 per cent of the total

demand, Mining Industry, railways, shipbuilding, the steel plants, packaging, and furniture-making are important fields where sawn timber finds extensive use.

The Islands have number of species of wood useful for general construction and furniture making. Some of the species, up-to-date not considered useful for these purposes can also be upgraded by seasoning only or by seasoning and treatment. The annual availability of logs that will be suitable for these purpose is expected to be about 1,50,000 tons. Since this estimate include logs of species like Badam and Gurjan which are also useful for the manufacture of plywood veneers, the logs available for saw milling may be only about 90,000 tons per year.

Industries relating to making of plywood veneer, match splints, particle boards, pulp for paper and rayon and packing cases are some of these wood-based industries that should ordinarily find extensive scope for development here. Some of these, of course, can develop only if large water resources are available, which unfortunately are lacking in these islands.

Boats both machanised and otherwise, are required in appreciable number in the islands for varicus activities. Andaman have timber species, Padauk, Tough-peing and Pyima which are excellent for boat building. This has got a good scope as feeder industries.

Consumer goods industries have got good scope in this islands since our dependences on consumers goods is almost 100% from mainland of India.

It has been stated earlier the islands are important producers of coconuts and are expected to produce annually about 18 million nuts by 1980. In the conversion of these nuts to copra or in their use for edible purpose, the huskcovering the nut is removed. The husk finds use in the coir industry as the source of fibre. In areas where no coir industry exists the husks are used mainly as fuel. The production of 18 million coconuts in the islands will correspond to an availability of about 1200 tons of fibre. Since the production of good quality coir fibre involves collection of green nuts and proper dehüsking for purposes of retting all the husks may not be available for fibre production. About 800 tons of fibre can be produced in these islands without much difficulty.

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Fancy decorative shells like turbo and trochus are available from the seas around the islands. These shells are used in the manufacture of articles like fancy Table lamps trays, buttons, etc. due to the pearly shine of the polished shell. The shells, which once had a good market in other countries, had been replaced for many of the uses by plastics. While demand still exists for fancy articles made of the shells the production of these articles may well be left to artisans, since these articles may lose their market value if produced in a mass scale.

The industries which have got immense potentiality and can grow in these islands have been divided broadly into two categories. These based on local resources and consumers goods industry for which there is ready market here. In the first category, wood based industries are most important.

Apart from wood-based industries there is vast scope for fish canning, sharkliver oil and coconut oil, coir ropes coir fibre and matting industries. The Andaman sea abounds in plenty of fish, sea coral waf, shells etc. and offers vast scope for such small scale and Handicrafts Industries.

In the second category there is ample scope for barbed wire, wire nails, automobile repairs op, tyre retreading and vulcannising, paints, ready made garments, sheet metal products, electrodes and electroplating, domestic utensils including Handicrafts Industries.

#### Cottage Industries and Handicrafts

There is immense scope for development of cottage industries and handicrafts here. Cane and Bamboo industry, shell-craft, Pottery, Furniture making, Coir etc. are some of the industries that could be developed on an extensive scales of cottage industries. Attempts were made in fits and starts during the past to develop these industries, but owing to lack of concerted efforts and organisational skill the efforsts did not meet with much success. During the Fifth Plan a fresh attempt is to be made to revive and encourage activities in these fields and to put them on a sound footing.

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Progress under the various Plans:

The Plan activities for promotion of industries in these islands were undertaken by the Cottage Industries Department which, to say the least was inadequate to give a proper impetus in the industries sector. The schemes being implemented from the 2nd Five Year Plan onwards related to establishment of various training-cum-production centres in various fields and distribution of tools and implements at subsidised rates, and also extension of financial assistance by the department. Many of the centres established in the earlier plans could not be continued in the later plans owing to apathy of the people and lack of a coordinated policy in relation to various training programmes and employment. Upto the end of Annual Plan 1968-69 an amount of Rs.19.894 lakhs only could be spent on various schemes under industries. The Fourth Five Year Plan included only 3 schemes for development of industries. These are distribution of improved tools at subsidised rates, managerial subsidy to industrial cooperatives and state aid to industries. The total amount proposed to be spent during the Fourth Plan on these schemes is only Rs. 3.782 lakhs. The following table will give a general idea of the haphazard growth of the various industries during the various plans:-

<u>Sl.No.</u>	<u>Classification of industry</u>	<u>No. of units.</u>
1.	Cotton weaving industry	2
2..	Leather goods industry	2
3.	Pottery Industry	3
4.	Oil crushing industry	8
5.	Palm Gur industry	5
6.	Cane Gur and Khansari industry	N.A
7.	Manufacturing and processing of agricultural and marine products and Forest produce including beverages industries	20
8.	Other village industries	110
9.	Handicrafts industries	12
10.	General engineering industry	6
11.	Chemical Engineering & Chemical industry	1
12.	Construction material industry	1
13.	Printing, Book binding and lithography industry.	3

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14. Saw mills, wood ware furniture	60
15. Miscellaneous Industries:-	
(a) Aluminium Utensil manufacturing industry.	1
(b) Stainless steel product industry	1
(c) Soap	1
(d) Candle	4
	<u>240</u>

Bottlenecks:

From the General study of the existing Cottage Handicrafts and small-scale industries the drawbacks and hindrances checking the spontaneous growth in this sphere can be easily lined up as follows:-

1. Scatteredness of the Islands and isolation from the mainland warranted with inadequate transportation and communication facilities.
2. Lack of an organised population who are divided unevenly in various communal linguistic and religious groups not having much affinity of tastes, culture, rites and rituals leading thereby to a scattered and haphazard demand for various cottage type articles.
3. Lack of market locally. With a small-size and mixed population scattered all over the islands marketing facilities have been limited only in and around Port Blair area. Other smaller pockets of growth do not offer any chance to cater the products of smallscale industries. Inter-islands transportation hazards and inadequate transport facilities have further immobilised the growth and expansion of small-scale and cottage industries.
4. Lack of capital is a general feature matching with the general economic backwardness of this area and less banking facilities.
5. The general backwardness of this Union Territory is also equally reflected on its labour class, craftsmen and artisans of various trades, marginal and semi-marginal efficiency standards of these sections of the people have contributed to a great extent towards its prolonged inertia and undeveloped nature of industries.

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Lack of training facilities in various trades upto the modern standard prevailing in the mainland still continues to some extent.

6. Shortage and uneven supply of raw materials both from mainland and local have been another drawback which has remained a discouraging factor in the minds of entrepreneur. This is furthered due to undependable and uncertain shipping services connecting these islands to the mainland. Supply of controlled raw materials is being made by the industries department presently but that also has to overcome transportation bottlenecks to reach here in time.

7. Free or concessional allotment of land to the small scale industrial units is being made but much still remains to be done as most of the units prefer to have developed sites (and preferably shells) with facilities of transport, communication, water, power at subsidised rate besides that of technical and other assistance from administration. This itself spells out the needs of industrial estates in an around Port Blair, which is having the best infra-structure in this Union Territory. This again calls for the crying demand of the local industrialists and craftsmen to have a full fledged directorate of industries with various technical staff,

8. Absence of an industrial policy has been a significant factor that has impeded the growth of the industrial sector in these Islands. On the basis of the recommendations of an Expert Team that visited these Islands in 1966 an industrial policy has been suggested to the Government of India for approval. It is hoped that the acceptance of this policy will go a long way in improving the growth of industries during the Fifth Plan.

#### Approach to the Fifth Plan

This envisages a fuller and planned utilisation of the locally available resources and raw materials for the development of industries. These include forest based raw materials like timber and various species, cane, bamboo etc. and plantation based industries like coir, agrobased industries like rice-milling, fruit processing and sea-based industries-like fish-processing/canning, Turbo and trochus shells etc. Attempts

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will be made to encourage all these industries in the private sector including coir where a pilot project has been drawn out for implementation for training, demonstration and production purposes. These locally available raw materials will be supplied at concessional rates and undisturbed flow will be sought to be maintained by the industrial department.

The Union Territory at present does not have any industrial estate. An industrial estate is supposed to be a determined attempt for growth of cluster-type industries within a suitable infrastructure. As some of the industries like bakery, printing press and small handicrafts would not be able to function economically outside Port Blair area and as limited land is available inside the Port Blair Municipality area it is proposed to have two industrial estate one at Port Blair and the other at Garacharma (8 KMs from Port Blair) with a strength of 10 factory sheds. These two industrial estates will be providing the assistance mentioned as per the industrial policy above. It is hoped that with the establishment of these two industrial estates a determined and definite headway will be made in respect of industrial development in this Union Territory.

This Union Territory is lacking the training facilities in various trades and lines of handicrafts inspite of the fact that a sizable population can still be accommodated in the sector industries through self employment and other opportunities. Although one departmental training centre on wood work and shell crafts is being run, it is highly oportune to diversify the scope of training on a modern line with upto-date equipments, tools, designs and sufficiently qualified staff. It is also proposed to have a scheme under which a limited numbe of advanced craftsmen could be sent every year to the mainland for an advanced training in collaboration with the All India Handicrafts Board. It is further endeavoured to spread out the training facilities on various trades at other growth pockets with further growth potentiality during the Fifth Five Year Plan. This is envisaged in view of the fact that with the projected growth in the near future the local boys should have job oppertunities open before them and the industries department will consider it a pious task to impart training to the local boys of that area and open new dimensiions of job opprotunities.

before them either in self-employment or employment in other industrial establishments both Government and private.

The implementation of all these/major schemes along with the lines of industrial development envisaged will thrust a huge burden and responsibility on the industries department. The present Cottage Industries Department with the existing set-up will be no match to take up such responsibility. It is in the interest of industrial growth in this Union Territory that a full fledged directorate of Industries has been recommended. This Directorate with full staff in position will be able to fulfill the aspirations of the industrialists here as well as to have an effective control and supervision over their day to day activities.

Thus once the priorities and potentials are sorted out, the mechanism of future development spelt out, the overall national and socio-economic and targets that have been proposed to cover up include employment generation, equitable income distribution, regional balance, self-reliance through self-employment opportunities and further satisfaction of the basic minimum needs. The approach also endeavours to strengthen the viability of the existing rural and small-scale industrial units with all-round chances of growth. Augmentation and diversification of the employment opportunities is considered to be one of the prior requirements for absorption of the present and the future generation in various jobs and small-trades. Depending upon the size of the resource allocations on the various pockets of growth and growth potential and the success of a firm programme for time-bound implementation duly and timely staffed, it is expected that the socio-economic object of combining economic welfare with that of economic growth will be fulfilled in the sector 'Industries' in this Union Territory. Over and above all these, the schemes proposed for the Fifth Plan are expected to bring about a propitious climate for the growth of industries in these Islands.

Broad outline of the Scheme for the Fifth Plan:

- (1) Establishment of Industrial Estates at Port Blair and Garacharma.

It is proposed to locate two industrial estates one at

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Port Blair which is headquarter of this Territory and is well connected with road and sea with other parts of Andaman and Nicobar Islands. The second industrial estate is proposed to be constructed at Garacharma, about 8 K.M. from Port Blair which is well connected by road to Port Blair. There are a number of industries already flourishing in the area and the location of the industrial estates will give great fillip to the development of small scale and cottage industries and will provide employment opportunities to the town as well as surrounding areas. The outlay proposed is about 23.00 lakhs.

(2) Establishment of Design Centre (Handicrafts) at Port Blair.

This territory is rich in forest based products like cane and bombeo ornamental timber of various species, sea based products like shells, corals etc. Even than the development of handicrafts of various designs and qualities did not take place upto satisfactory level mainly due to lack of training in these lines. The present raining centre in wood work and shell craft is proposed to be converted into a Design Centre(Handicrafts) for the following purposes and no provision for building has been kept in the estimate for the purpose.

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- (a) To impart training in various crafts such as wood carving and decorative furniture, cane and bamboo work, shell-craft, painting and interior decoration.
- (b) To give facilities of a technical library and new designs to the local craftsmen.
- (c) To create marketing facilities for the handicrafts locally made.

The duration of training will be 18 months with 6 months in-plant training in the craft in which they have been trained. In each batch there will be 5 trainees in each trade with stipend of Rs. 50/- P.M.

The outlay involved will be to the tune of Rs. 5.00 lakhs..

(3) Advanced training in Handicrafts at Mainland.

The territory is rich in forest based and sea based products like cane and bamboo, ornamental timber of various species, shell, corals, etc. Even then, the development of handicrafts of various designs and qualities did not take place upto a satisfactory level mainly due to lack of training in these islands. This scheme has been formulated for the following purpose.

To impart advanced training in various shell crafts, wood based handicrafts, cane and bamboo work and various handicrafts like dolls, follower vase, vanity bag etc. and also advanced training in various handicrafts on clay paris-plaster, paintings, models and interior decoration.

The scheme envisages to solve the problem of all-round backwardness of our handicrafts artisans by sending 6 artisans in a year for a period of 3 months for advanced training in handicrafts on modern machines, designs, chemicals with a view to learn various

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Modern crafts, to the Regional Design Centre All India Handicrafts Board, Calcutta.

It is expected that after completion of training the handicrafts artisans will introduce the same in their respective home units and bring about modernisation of machineries and improved methods with varied subjects and designs.

This scheme has been evolved in consultation with the director of the regional design centre, All India Handicrafts Board, Calcutta. The outlay for the scheme is tentatively fixed at Rs. one lakh.

(4) Training centre in Carpentry and Blacksmithy and Bamboo work at Rangat.

Rangat is considered as the best growth centre located at North and Middle Andaman with comparatively better transportation service, more roads, electricity, post office, sizable population and a market with other facilities. Rangat will have full pre-requisites of a growth centre for acceleration of small scale and Cottage Industries. Moreover the years of 5th Five year Plan may see Rangat directly linked with the South, Middle and North Andaman by road meaning thereby enhanced facilities of marketing and smooth movement of raw materials, men and other essentials to cater the small units there. This will help the local boys of that area in establishing their own units either on Handicrafts or small scale pattern which will solve the unemployment problem of that area to some extent. This will also help diminishing the regional imbalance compared with the port Blair and surrounding areas.

With a view to produce artisans community and to impart training it is proposed to establish a training centre in carpentry and blacksmithy and cane and bamboo work at Rangat.

The outlay proposed is about Rs.3.5 lakhs.

5(a) Pilot project scheme for coconut husk utilisation.

The Union Territory is a big waster of coconut husk which should be made use of in the respective industries i.e. coir. According to the statistics available, there are approximately 1450 hectares under coconut plantation in the Andaman and Nicobar Islands, and 5870 hectares in Nicobar group of islands providing approximately annual yield of 45,41,000 nuts. In Nicobar group of islands about 2/3 of the nuts are harvested in the tender stage for feeding pigs, for human consumption and remaining 1/3 is allowed to mature for being utilised as copra. It appears that the 1/3 of nuts out of the 2/3 may be available for making fibre which can fetch a good price and may help in the economic development of these islands. The scheme will provide large employment opportunities to the people of the region. This unit will be a demonstration type of unit to render technical assistance to the new enterprisers and persons engaged in coir industry in Andaman and Nicobar Islands.

This scheme has been formulated in consultation with the coir board. The estimated expenditure is Rs.2.5 lakhs during the Fifth Plan.

5(b) Demonstration Centre Coir Works.

With a view to utilise the fibre produced out of pilot project and impart training in coir manufacturing, it is proposed to establish Demonstration centre in coir. In this unit 10 persons will be enrolled for 18 months training in coir fibre utilisation. The trainees will be paid Rs.50/- p.m. as stipend at the time of training.

The estimated expenditure is Rs.2.00 lakhs under this scheme.

6. Strengthening of the Industries Department.

This relates to the basic objectives of fulfilling the aspirations of our artisans and small units, through departmental help, guidance and supervision. Presently this department is extremely under-staffed and not able to cope up with the increasing needs and demands of our small industrialists and artisans. The Fifth Plan will see accelerated development of new units and individuals with immense prospects in various fields like fish-canning, timber-sawing, window and door frames, umbrella sticks, service workshops, coir products, oil extraction, barbed wire, wire nails, tyre retrading and vulcaning, ready made garments laundries, soaps scents and various other lines.

All these along with the new schemes proposed above will be effectively supervised and assisted. For this purpose the entire staffing pattern of the Industries Department should be overhauled.

A Directorate of Industries is proposed to be established with a Director of Industries. Under the Director of Industries who will be a senior officer in the scale of Rs.900-1250 there will be 2 Assistant Directors, 4 Inspectors, 4 Technical Assistants, 2 Statistical Assistants and other clerical staff. This will involve an expenditure of about Rs.8.00 lakhs during the Fifth plan.

The schemes proposed above will be in addition to the scheme at present implemented by Cottage Industries Department. Thus the Directorate of Industries will be concerned with the following activities during the Fifth Five year plan:-

- (a) Establishment of departmental training and production centre.
- (b) State Aid to Industries under Andaman and Nicobar State Aid to Industries Rules, 1964.
- (c) Managerial subsidy to industrial cooperatives.
- (d) Distribution of improved tools on 50% subsidy.
- (e) Establishment of Industrial Estate.
- (f) Advance training in handicrafts at mainland.
- (g) Pilot project(Coira) for coconut husk utilisation
- (h) Strengthening of the Industries Department other activities in addition to the permanent activities
- (i) Marketing facilities. Establishment of new small scale Cottage, Village handicrafts including medium industries.
- (j) Registration of the small scale industries, procurement of raw material for the consumption of local industries including controlled and imported.

- (k) Financial Assistance and survey of industries.
- (l) Procurement of machines on hire purchase through NSIC and technical assistance to small scale, cottage, handicrafts, and village industries.
- (m) Implementation of centrally sponsored schemes and other schemes for development of cottage, Village and Small Scale Industries.
- (n) Implementation of C.D. Block programmes under the sector Rural Arts, Crafts and Industries.
- (o) Coordination work with other agencies like All India Handicrafts Boards, Coir Board, Khadi and Village Industries Commission etc.

The following centrally sponsored schemes will be in operation during the Fifth Five year plan:-

- (i) 10 percent outright grant or subsidy by the centre to the industrial units in this Territory for development of Industry.
- (ii) Rural Industries Projects programme.

The Directorate will also be entrusted with the task of publicizing the facilities available for establishing industries in these islands with a view to attracting private enterprisers in this sphere. It is hoped that with adequate incentives which are envisaged in the Industrial policy, private enterprises will find it extremely attractive to establish industries particularly the wood-based industries.

TRANSPORT AND COMMUNICATIONS

No developmental programme can have its proper impact on the economy as a whole unless there is an effective network of transport and communication facilities. Construction of roads was taken up even during the First Plan itself in spite of the absence of an integrated five year plan. Development of roads, ports and harbours and shipping started on an extensive scale right from the Second Plan onwards. Upto the end of the annual plan 1968-69 a total amount of Rs.752.552 lakhs was spent on these sectors.

During the Fourth Plan also, the same pattern of priorities continued. Out of the total original allocation of Rs.14 crores, an amount of Rs.774.203 lakhs was earmarked for Transport and communications only. The Fourth Plan outlay has since been found to be inadequate and it is expected that by the end of the Fourth Plan, an amount of Rs.783.608 lakhs will have been spent on Transport and Communications.

Approach to the Fifth Plan and broad outline of the Schemes.

In spite of the heavy investments already made in this sector, the economy is still not in a position to boast of a highly satisfactory system of communications and transport. This, points to the need for further development in this sector and that is essential why in the Fifth Plan also high priority has been accorded to this sector.

A. Roads.

(i) Andaman Trunk Road.

An allotment of Rs.300 lakhs for construction of roads and Rs.50 lakhs for purchase of road construction machinery was provided for in Fourth Plan. A length of 103 Kms. of road was to be completed during this period. Upto August, 1972 an expenditure of Rs.115.81 lakhs has been incurred and 37 Kms. of road has been completed. The work was slow in the earlier period for want of adequate machinery and other difficulties. Additional machinery has been sanctioned by the Govt. of India and with



targets of Fourth Plan will be substantially achieved.

The portion of the work from Mayabunder to Diglipur, approximately 80 Kms in length, is to be taken up and completed during Fifth Plan. Between Chidiatapu and Mayabunder, there are two ferry crossing and shore facilities like sea walls, etc. have to be provided for the ferry service to be operated by the Marine Deptt. A provision of Rs.10 lakhs is being made for such works during Fifth Plan.

(ii) District and Rural Roads.

In the Third and Fourth Plans, District and Rural Roads were indicated separately. But as most of the places in these islands except Port Blair are only small villages, it is proposed that both these categories be classified under one scheme.

During the Fourth Plan, an amount of Rs.47 lakhs have been provided for these schemes and a physical target of completion of 50 Kms of road was aimed at. The allotment was much below the minimum required to meet even the basic needs of the settlements and diversion of funds from other schemes has been proposed. An expenditure of Rs.69.30 lakhs have been incurred upto August, 1972 and at the end of Fourth Plan, the expenditure is likely to be Rs.103.00 lakhs and 54 Kms of road under both the categories are expected to be completed.

As stated in the above paragraph, because of paucity of funds, all the schemes in progress would not be completed within the Fourth Plan period. Taking into account the likely expenditure on various schemes on hand, it has been assessed that a sum of Rs.30 lakhs in the case of rural roads and Rs.20 lakhs in the case of district roads will be required to complete the works on hand. After going through the various proposals received from public as well as other agencies, a list of additional roads which will be necessary to be taken during Fifth Plan has been prepared and is indicated in Annexure I. At present, the rural roads and district roads are

done with a paved width of 9 to 10ft. In view of the persistent demand from public to run bus services to far-flung villages, it is felt that a paved width of 12ft. will be necessary in all these roads. A width of 12 ft. is also necessary to facilitate movement of heavily laden lorries of Forest Department which will be using these roads for utilisation of forest. The costing of these roads has been done on the assumption that the roads will be constructed to 16 ft. width of embankment and 12 ft. width of payment. On the whole, 130 Kms of roads are proposed to be taken up during Fifth Plan (details as indicated in the Annexure I).

(iii) Improvement of roads and bridges in places other than Port Blair.

A meagre provision of Rs.15 lakhs was made and not much could be achieved. However, by diverting some savings from other schemes/sectors a few important works were taken up. Upto August, 1972 an expenditure of Rs.16.4 lakhs has been incurred. The likely expenditure at the end of Fourth Plan is Rs.23 lakhs.

The following type of works will be taken up during Fifth Plan under the scheme.

- (a) Improvement of road surface of pre-war construction which forms part of Andaman Trunk Road.
- (b) Improvement of road surface in other places where due to heavy traffic or because of peculiar topographical conditions, the road has deteriorated badly.
- (c) In portion where the traffic is heavy, widening of the aboulters by 2 ft. on either side so as to provide for proper cross over of vehicles plying in either direction.

Taking into account the requirements and the capacity of the department, it is felt that an amount of Rs.15 lakhs per year should be provided for under this scheme.

(iv) Improvement of roads in Port Blair.

A meagre provision of Rs.7 lakhs was provided in the Fourth Plan against our requirement of Rs.25 lakhs. This has been found absolutely inadequate. The expenditure under this scheme is likely to be Rs.18 lakhs at the end of Fourth Plan. Even then many of the works which are felt absolutely essential would not be taken up for want of funds.

The traffic in Port Blair is incureasing very rapidly and ~~the~~ the surface and width of roads have to be improved so as to enable them to cope up with the traffic. The road side drains also have ~~to~~ to be made pucca in the congested areas. to provide for efficient drainage. In the Fourth Plan, the provision was only ~~Rs~~7 lakhs against a demand of Rs.25 lakhs. In spite of earnest efforts to obtain more funds, it has not been possible to achieve much during the Fourth Plan. It is therefore felt that an expenditure of Rs.10 lakhs per year in the Fifth <sup>Five</sup> Plan will be essential for improvement of works in Port Blair. These works will consist of -

- (a) Making single lane traffic roads into two-lane traffic in areas where traffic intensity is more.
- (b) Improving the surface of roads by providing for pre-mix carpet instead of surface dressing existing at present.
- (c) Improvement of road side drains and widening of culverts and easing the curves in difficult junctions.
- (v) Construction of bus recess.

A sum of Rs. 1 lakh is provided for bus recess in Port Blair, but no work had been taken up under this scheme during Fourth Plan.

It is felt that bus recess will have to be provided in a few places on the bus routes and small shelters also will be necessary to enable the passengers to wait before taking the bus. It was felt that about 25 shelters may have to be built during Fifth Plan and a sum of Rs.5 lakhs is to be provided.

- (vi) Purchase of road construction machinery.

The requirement of funds for purchase of machinery during Fourth Plan was Rs.70 lakhs but the plan provided for only Rs.50 lakhs. During the middle of plan period, a further review was made regarding requirement of machinery and replacement of worn out machinery and after making into consideration, the delay in the procurement of sanctioned machinery and also the fact that it is necessary to achieve the target fixed for Fourth Plan, sanction for purchase of additional machinery worth Rs.57 lakhs have been given. It is expected that an expenditure of Rs.97 lakhs will be achieved during Fourth Plan period.

Taking into account the equipments which have already been sanctioned during Fourth Plan, it was felt that additional machinery may not be necessary except for purchase of one loader equipment which will be very useful for doing large scale earth work in roads.

Apart from this, replacement of old machinery during Fifth Plan has been provided. Taking into consideration the present condition and life of the machinery, it is felt that the following items of machinery may have to be replaced during Fifth Plan period.

1. Bull Dozers - D-120	2 Nos.
2. Rollers - 8 to 10 ton capacity	10 Nos.
3. Trucks/Tippers	35 Nos.
4. Jeeps	8 Nos.
5. Hot mix plant and paving machines	2 Nos.
6. One boat for PWD for carriage of materials to various islands (100 tonnes - all weather boat)	1 No.
7. Tar Boiler	20 Nos.
8. Stone and sand crusher	2 Nos.
9. Earth moving and soil stabilisation equipment	

Annexure I

The total outlay under this sector works to Rs.945 lakhs. The following table gives in brief the tasks and their magnitude during the Fifth Plan under 'Roads'.

	<u>Rs. in lakhs</u>
(1) Andaman Trunk Road	290.00
(2) Rural and District Roads	
(a) Manglutan to Guptapara beyond Guptapara nalla (beyond phase I under progress) to connect with T.R. between Chidiatapu and Rangachang.	8 Kms.
(b) Wrightmyo to Shoal Bay (beyond 8 Kms under progress) connecting Shoal Bay Camps 12, 4, 15 & 19.	7 Kms.
(c) Swarajgram to Shyam Nagar (Blair Bay)	12 Kms.
(d) Kalighat Jetty to Jaganathadera	10 Kms.
(e) Kalipur to Ramnagar	15 Kms.
(f) Jinghanalla to Thiruvanchikulam connecting all villages.	10 Kms.
(g) Kalara to Trunk Road	5 Kms.
(h) Tugapur South to Hanspuri Bajota via Pudumadurai (Bajota)	23 Kms.
(i) Pudumadurai to Chainpuri	5 Kms.
(j) Roads in Havelock from Camp III to Kalapathar	<u>10 Kms.</u> <u>105 Kms.</u>
(k) Road in Kamorta	15 Kms.
(l) Roads in Southern group of Islands.	15 Kms.
(m) Extending the village road from Herbatabad to Tirur and beyond upto settlers.	<u>5 Kms.</u>
Total	130 Kms
@ 2.75 lakhs/Kms	357.50

(3) Improvement of roads in place outside Port Blair.	75.00
(4) Improvement of roads in Port Blair	50.00
(5) Provision of Bus recess	5.00
(6) Purchase of road construction machinery	<u>167.00</u>
	Rs. 944.50
	or
	Rs. <u>945.00 lakhs</u>

B. Road Transport.

By the end of the Fifth Plan, the State Transport Department will have a fleet of 57 buses for operating on routes in South Andaman, Middle Andaman, North Andaman and Car Nicobar.

Owing to the anticipated increase of demand for passenger transport facilities, the fleet strength of 57 buses at the end of Fourth Five Year Plan would be very much inadequate. Therefore the need for re-organisation of the Motor Transport Department for better and efficient management is emphasized in the Fifth Plan. With a view to providing fast and economic transportation facilities for the public and helping colonisation and encouraging agricultural and Industrial developments during the Fifth Five Year Plan period, the following programmes for inclusion in the Fifth Five Year Plan schemes are suggested. The trend of progress of construction of roads has been taken into consideration while suggesting the schemes:

1. Extension of bus service from Jirkatang to Baratang by introduction of trunk service between Port Blair and Baratang in addition to the existing service between Port Blair and Jirkatang.

2. Extension of bus service from Rangat to Oralkatcha (Trunk Service) in addition to the existing service between Kousalaya Nagar and Rangat.
3. Extension of bus services to colonisation areas in North Andaman (Diglipur area).
4. Augmentation of Trunk Service between Mayabunder and Rangat.
5. Introduction of bus service in Havelock (12 Kms Road already sanctioned).
6. Introduction of bus service in Little Andaman for Hut Bay to West Bay via Dugong Creek (15 Kms road from Hut Bay to Jackson Creek already sanctioned).
7. Augmentation of existing service at Car Nicobar.
8. Introduction of Bus service in Katchal.
9. Introduction of bus service in Great Nicobar (construction of 30 Kms road by D.G.B.R. has already been taken up by Rehabilitation.
10. Augmentation of bus service in South Andaman.

It is tentatively proposed to purchase 20 buses during the Fifth Five Year Plan period in a phased manner subject to mid term revision in accordance to the progress of construction of new roads during the Fifth Plan period.

Since this Territory is having heavy rainfall for the major part of the year, adequate number of sheltered bus stands at important places and road junctions and also bus terminus as required should be provided towards passenger amenity during the plan period.

The existing organisational set up of the Motor Transport Department is very much inadequate to maintain the services to the desired efficiency and economy. The increase in fleet strength of the vehicles and extension of services to new areas will result in heavy commitment

and in case adequate expansion is not arranged by proper reorganisation of the department, the efficiency and economy would lag behind and the same may lead to serious dislocation of services and result in heavy loss to the Government. Hence the department should be sufficiently strengthened and workshop facilities should be provided at all the centres/depots where the services are maintained.

With a view to improving arrangements in existence for provision of necessary repairs facilities, accommodation for staff, storage facilities for fuel oil and stores etc. specially for the out-stations, a separate scheme is suggested for the Fifth Plan for 'Improvement of services Facilities'.

A tentative allocation of Rs.80 lakhs is proposed for all the schemes under 'Road Transport' for the Fifth Plan.

### C. Ports and Harbours.

It was observed that the lack of adequate water transport facilities constituted the major bottleneck in the accelerated development of these islands, as the water transport is the major means of communication requiring use of ships. Priority need therefore, was to provide adequate harbour facilities at the different sites. During the first three Five Year Plans, there was negligible achievement in harbour and port construction in Andaman and Nicobar Islands, mainly due to inadequate technical know-how and lack of equipments. In 1964-65 when it was decided by the Government of India to have the



accelerated development programme of these islands, the foremost need was felt for construction of jetties and harbours. In the Fourth Five Year Plan following provision was made for the construction of harbours and other works in State sector and in Central sector as detailed below:

(i) Provided under Central	Rs.514.00	lakhs.
Sector of Ministry of		
Transport.	+ <u>13.50</u>	"
	Rs.527.50	lakhs
(ii) Provided under State scheme		
of Andaman and Nicobar		
Administration.	Rs.140.00	"
(iii) Provided by the Ministry of		
Food and Agriculture for	Rs. 50.00	"
Fisheries Harbour at Port Blair.		
(iv) Provided by the Ministry of		
Rehabilitation for Trunk	Rs. 49.19	"
Road at Little Andaman and	+ <u>22.81</u>	"
Buildings at Port Blair,		
Little Andaman and Katchal	Rs.789.50	lakhs
	-----	

After the funds were given much head-way was made, but the work had to be restricted to the extent of funds made available. It can be said that the works taken up in the Fourth Five Year Plan constitute only the first step in the development of the harbour facilities and much remains to be done. The amount provided in the Fourth Five Year Plan is expected to be spent fully in completing the major portion of the plan works, except few spill over works.

In addition the Fourth Plan included schemes relating to installation of navigational aids, procurement of additional plants and machinery for strengthening dockyard workshop, construction of lighthouses, pontoons,

The total cost under 'Ports Harbour's during the IV Plan was Rs.221.278 lakhs.

The achievements till the end of the Fourth Plan would included a RCC berthing Jetty capable of taking inter-island vessels at Diglipur, a RCC berthing jetty at Mayabunder, a jetty at Havelock and Neil, major portion of the work for the slipway at Phoenix Bay, improvement to the existing jetty at Rangat etc. The Haddo wharf, the fisheries harbour, permanent jetty and break-water at Little Andaman are being constructed outside the Union Territory's Plan.

While framing scheme-s for the Fifth Plan the additional requirements of jetties and harbours as a result of construction of more roads, particularly the Andaman Trunk Road, have been taken into consideration. Moreover spill-over under Fourth Plan from some of the schemes has <sup>also</sup> been taken into account while drafting the schemes for the Fifth Plan.

#### Broad outline of the schemes for the Fifth Plan.

##### 1. Installation of Navigational Aids.

Navigational Aids in the Andaman and Nicobar Islands were an unknown factor prior to 1964 and was almost non-existent. In order to overcome this short-coming a scheme for provision of Navigational Aids, such as Harbour-lights lighted-buoys, beacons etc. was included in the 4th Five Year Plan. A reasonable amount of work in the installation of these Aids have been completed and equipment for lighting has also been

and Lightships. There may be spill over owing to non-receipt of lighting equipment and this spill over is to be included as a separate scheme in the Fifth Five Year Plan. A tentative outlay of Rs.20 lakhs is proposed for this for the Fifth Plan.

In addition to whatever has been planned already, with the increasing number of ships making use of these islands, the following additional requirements have been found to be necessary. The following is a fresh scheme with details for implementation in the Fifth Plan.

Sl.No.	Name of Scheme.	Estimated cost civil works.	Equipment	Total cost during 5t Plan.
		Rs.	Rs.	Rs.
1.	Sectorised Beacon at the N.W. Tip of Ross Island (Port Blair)	75,000	75,000	1,50,000
* 2.	Sectorised Beacon at Command Point (Port Blair)	-	45,000	45,000
* 3.	Lighted Beacon at Dundas Point.	25,000	45,000	70,000
4.	2 sets Transit marks at Chatham Jetty.	9,000	1,000	10,000
5.	2 sets transit marks at Haddo Wharf.			
6.	Lighted Beacon at Bampoka (Teressa Island).	1,00,000	1,00,000	2,00,000
* 7.	Transit lights at Campbell Bay (Leading Lights)	1,00,000	-	1,00,000
8.	Lighted Beacon at Campbell Bay.	75,000	1,00,000	1,75,000

9. Lighted Buoy/Beacon at Sunk Rock Campbell Bay.	75,000	1,00,000	1,75,000
10. 4 Nos. Unlighted Buoys at East Bay Katchal.	2,50,000	-	2,50,000
11. 2 Nos. lighted Beacons at Nancowrie.	<u>1,50,000</u>	<u>2,00,000</u>	<u>3,50,000</u>
	8,59,000	6,66,000	15,25,000
Say	8,60,000	6,70,000	15,30,000

Foreign exchange component Rs.4,00,000/- approximately

\* Spill over schemes of IV Plan.

2. Procurement of additional Plant and Machinery.

The activities of the Government dockyard in Port Blair has increased owing to the larger number of water crafts, the dockyard has got to maintain. In view of this a scheme for purchase of additional machinery for strengthening dockyard work shops, was included in the Fourth Five Year Plan. Out of this certain machinery has been ordered and received and one or two items of machinery have not yet been received. These include one Universal Milling Machine and one Vertical Milling Machine. Orders were placed for the supply of these and the Director General of Supplies and Disposals has not yet finalised procurement action. It is quite likely that the supply will only take place during the next -- Five Year Plan. In view of this, this scheme has been included as a fresh scheme in the 5th Five Year Plan. The expenditure expected to be incurred is Rs.2 lakhs.

3. Construction of Lighters and pontoons.

In order to improve unloading facilities at Port Blair and other minor ports a scheme for purchase of 2 Nos. 100 ton barges, 10 Nos. steel pontoons and 5 Nos. 50 ton

timber barges was included in the 4th Five Year Plan. Owing to reasons beyond the control of this Admn. such as non-availability of steel etc. the procurement of these items have been delayed. The following is the present position regarding this.

- (a) Two 100 ton barges ordered and nearing completion at Vishakapathanam. It is expected that these will be delivered during 1972-73.
- (b) Two steel pontoons have been completed at Calcutta and awaiting shipment. It is expected that these will be reaching us before the end of 1972.
- (c) One 50 ton timber lighter constructed in Marine Dockyard.

From the above it can be seen that 8 steel pontoons and 4 timber barges are yet to be constructed. Procurement of additional pontoons and barges are still necessary so that unloading facilities at out-stations could be improved. Since these will not be ready during the 4th Five Year Plan period, the spill over has been included as a special scheme in the Fifth Five Year Plan. Expenditure expected during the Fifth Five Year Plan is Rs.5,72,000/-

4. Extension and improvement of existing jetties.

In order to improve harbour facilities at Rangat and Car Nicobar a scheme was included in the Fourth Five Year Plan for re-construction of Rangat Bay jetty and extension of jetty at Mus at Car Nicobar. Survey and investigations have been completed and the work will be taken up during the Fifth Plan. An outlay of Rs.40 lakhs is proposed.

The existing jetties at Oralkatcha, Uttara, Kalighat and some jetties at Port Blair (Hope Town, Bambooflat, Dundas Point, Viper Island and Mithakhari) are all in a dilapidated condition and require reconstruction/extension and strengthening. Unless these jetties are reconstructed and strengthened the increasing traffic of passengers as well as cargo to these islands will not be properly handled. The approximate cost of these is being worked out. Tentatively Rs.50 lakhs is proposed for this work.

5. Development of Phoenix Bay.

Development of Phoenix Bay and construction of jetty, Marine slip-way and a ferry wharf were included in the scheme for fourth Five Year Plan. The work is in progress at present. The spill over will have to be given as a fresh scheme in the 5th Five Year Plan. An outlay of Rs. 5 lakhs is proposed for the spill over works and an outlay of Rs.100 lakhs will be required for construction of Dry Dock at Port Blair.

6. Re-construction of Chatham Jetty.

The old timber jetty at Chatham was found unsuitable for berthing larger vessels and in order to improve berthing facilities a scheme for reconstruction of Chatham Jetty was included in the Fourth Plan. Only certain amount of this work will be completed during the Fourth Five Year Plan. This work is being executed under traffic. As, for decades the only berthing facility available at Port Blair was the timber jetty at Chatham and was to be converted to permanent R.C.C.

jetty and there has been no other alternative except to carry out this work under traffic resulting in the work being constantly interrupted during berthing and unberthing of vessels and during loading and unloading of cargo. As originally planned all the mainland ships could not be diverted to Haddo Wharf which is under construction by the Military Engineers Service and which could not be commissioned early as planned. This resulted in providing additional works for construction purpose. In addition to the above due to increase in minimum wages three times during the Fourth Five Year Plan, increase in prices of machinery and equipments and increase in the cost of major consumable items such as cement, steel, timber and P.O.L. products, the work cannot be completed within the estimated amount of Rs.75 lakhs. Additional funds to the tune of Rs.10 lakhs will be necessary in the Fifth Five Year Plan to complete the work, and Rs.80 lakhs will be required for extension of Chatham Wharf and approach to Chatham Wharf Causeway.

7. Provision on abutment for berthing vehicle Ferry - Andaman Trunk Road.

This scheme envisages construction of 6 concrete abutment suitable of berthing/heading vehicle ferries at the terminal points in the Andaman Trunk Road. These abutments should be constructed in such a manner as to suit berthing and driving in/driving out of Heavy Vehicles such as S.T.S. Buses, 7 tons Trucks etc

Estimates can only be worked out after proper survey of areas concerned is completed.

8. Purchase of Heave-up Boats, Tugs etc.

During the Fourth Five Year Plan a scheme was put up for purchase of one self propelled Heave-up-Boat and one self propelled water barge-200 ton capacity. This scheme could not be taken up as a result of the shortage of funds during the Fourth Five Year Plan owing to shortage of funds. Acquisition of one Heave-up Boat and one self propelled barge s could be included in the Fifth Five Year Plan.

(a) The heave-up boat is essential to maintain navigational aids such as beacons, buoys etc., provided in the Harbour at Port Blair as well as at harbours in outlying areas. Unless such a boat is readily available to the Harbour authority it will not be possible for him to maintain these navigational aids which has been provided at great cost.

(b) At present we have only one 100 ton water barge and we find that this vessel is incapable of meeting the full requirements of supply of water to the larger number of vessels calling at this port. Further our experience has been that a larger number of vessels are also calling at this Port now and their requirements are also on the increase. In order to ensure maximum supply



of fresh water to ships it is essential that we should have at least one additional water barge of 200 ton capacity.

A provision of Rs.60 lakhs is proposed in the Fifth Five Year Plan for the acquisition of the above 2 vessels.

With the reconstruction of Chatham Jetty and the commissioning of Haddo jetty and the introduction of compulsory pilotage at Port Blair, the necessity to have at least a minimum of 2 powerful tugs for this purpose is strongly felt. We have ordered during the Fourth Five Year Plan one 750 HP harbour tug. It is not possible to include a more powerful tug during the Fourth Five Year Plan owing to non-availability of finances. In view of the above the procurement of one 1500 HP ocean going tug should be included in the Fifth Five Year Plan.

Provision for Fifth Five Year Plan - Rs.40 lakhs to be made for this purpose.

#### D. Shipping

The anticipated expenditure during the Fourth Plan on 'Shipping' is Rs.57-927 lakhs.

It will be possible to get only five 40' boats and one 60' boat during the Fourth Plan. Construction of two 60' boats will be carried over from the Fourth Plan to the Fifth Plan.

There was originally a scheme to purchase a ferry vessel similar to m.v.'Little Andaman' during the Fourth

Plan. This, however, will not be achieved during the Fourth Plan owing to delay in procurement action. Procurement of this vessel will, therefore, have to be done during the Fifth Plan.

When m.v. 'Tarmuqli' was accepted by this Admn. the Ministry of Home Affairs had given this Admn. to understand that approval for acquisition of a second touring vessel would be given. There is need to have a second touring vessel having a 150 to 200 tons cargo carrying capacity also. Specifications for this vessel have been sent to the Mercantile Marine Department. This vessel costing approximately Rs.40 lakhs will have to be purchased during the Fifth Plan.

Many of our passenger vessels have become too old for efficient running and, therefore, replacement has become absolutely necessary. At least six boats of the m.v. 'Yamuna' and m.v. 'Ganga' type will have to be procured during the Fifth Plan.

Time and again, difficulty has been experienced in evacuating seriously ill patients from outlying areas to hospitals where required facilities are available. To meet such emergencies, it is suggested that two hospital vessels having a minimum speed of 14 knots should be purchased during the Fifth Plan.

The completion of Andaman Trunk Road will bring in the need for ferry vessels to connect different stretches of the Road. It is anticipated that **at least 8** self propelled vessels should be purchased to run such ferries.

A tentative allocation of Rs.300.000 lakhs is proposed under Shipping for the Fifth Plan.

Suggestions for future policy

At present, transportation facilities between the various islands are confined to ferry/shipping services. In the interest of efficient Administration, it is necessary to air link various islands. This question is already under the consideration of the Govt. of India.

At present, the Administration is directly looking after Bus Transport, Inter-island shipping and Harbours. It may be worthwhile to examine if a Corporation or a Board can be formed on the analogy of the Road Transport Corporations or Harbour Boards elsewhere in India. Such organisations will have the added advantage of getting financial assistance from other agencies that are usual not available to a Government Department.

With a view to increasing transport and communication facilities between these islands and the mainland, the question of increasing the number of flights between Calcutta and Port Blair and also introduction air service between Madras and Port Blair should also be examined. A programme to strengthen the run-way at Port Blair has already been taken up and once this is completed, it may be possible to have increased air transport facilities between the mainland and these islands.

TOURISM

The Union Territory of Andaman and Nicobar Islands consists of over three hundred islands scattered in the Bay of Bengal. Port Blair, the headquarters of the Andaman and Nicobar Administration is about 1225 K.Ms away from Calcutta and 1191 K.Ms from Madras.

These Islands have a temperate climate and an average rainfall of about 3000 m.m. The scenic beauty presented by the hill-slopes and valleys co-existing with long beautiful sea-coasts, beaches and creeks offers tremendous potential for development of tourism here. Isolated from the mainland as they are, these islands have a calm and peaceful atmosphere ideally suited for the tourists coming from the din and bustle of the cities, a holiday resort where they can relax and enjoy themselves in the quiet, natural atmosphere of the place. Yet much has not been done to tap this potential. For security reasons these islands have been closed to foreign nationals and to that extent development of tourism to attract foreign tourists has not been envisaged. Even with respect to the home tourist, it has not been possible to do much, owing to the lack of an organisation that could devote itself exclusively to this task.

The Andaman and Nicobar Administration is comparatively a small one. The Publicity wing of the Admn. working under the Development Commissioner has been looking after tourism development programmes. It is proposed to establish a suitable organisation in the Fifth Five Year Plan to attend to the development of tourism.

Any tourist coming to the island would require the basic comforts of accommodation, food and transport. Any scheme for development of tourism in these islands, therefore, has to tackle these problems first.

There is no standard hotel or restaurant in these islands. The accommodation available for tourists consists of two Tourist Homes and one Circuit House - all located in the headquarters at Port Blair in South Andaman. The accommodation in all these put together is 39 beds. Rest Houses have also been put up in other islands at places like Rangat, Mayabunder and Diglipur in the Northern group of Islands and Car Nicobar and Nancowry in the Southern group of islands. Catering arrangements for tourists are being made by caretakers of the Rest houses.

Since these islands are scattered and lie far apart, there are difficulties in providing easy transport facilities. Transport facilities can be categorised into two (a) between the islands and the mainland and (b) inter-island.

There is a bi-weekly Viscount Service between Calcutta and Port Blair via Rangoon operated by the Indian Airlines Corporation. This service is available from Calcutta to Port Blair on Mondays and Thursdays and from Port Blair to Calcutta on Tuesdays and Fridays. The journey via Rangoon takes five hours. Single air fare is Rs.309/-.

The Shipping Corporation of India are operating shipping services between Calcutta and Port Blair and

between Madras and Port Blair with two of its ships s.s. 'Mohammedi' and m.v. 'Andamans'. It takes about 4 days for the ship to cover the distance from Calcutta to Port Blair and about 5 days from Madras to Port Blair via Car Nicobar. These ships provide both cabin and bunk class accommodation. The charges for cabin class accommodation vary from Rs.207 to Rs.354/-, whereas bunk class accommodation costs Rs.41/-. These scheduled sailings are available approximately once a fortnight.

The Government Motor Transport department is operating regular bus services in South Andaman, North Andaman and Middle Andaman in the Andaman group of islands and Car Nicobar in Southern Group of Islands. Taxi-cabs are available at Port Blair and a few other places in the Andaman group of islands. Regular ferry services are being operated to facilitate travel from one island to another. There is no railway in this territory.

Port Blair, the headquarters of the Territory, is the most developed area. It can boast of a fairly good shopping centre. The Cottage Industries Deptt. is running an emporium where various handicrafts are displayed for sale. Articles made of timber are available in this emporium and also at the show room of the Forest Department at Chatham, in Port Blair.

Planned Development of these islands for tapping tourist potential started only with the Third Five year Plan. A provision of Rs.3.00 lakhs was made under 'Tourism' in this plan mainly for the implementation.

of two schemes, 'Development of Tourist Spots' and Construction of a 'Tourist Home'. The Tourist Home at Haddo was constructed under this scheme. Expenditure during the Third Plan period was Rs.3.46 lakhs against the outlay of Rs.3.00 lakhs.

Two schemes, (1) Construction of a Tourist Lodge for low and middle income group tourists and (2) Development of picnic spots, were included in the IV Five Year Plan under sector 'Tourism'. A dormitory type building to accommodate 20 persons has been completed during this plan period. Programme to construct a swimming pool had to be dropped owing to the high cost involved. Procurement of a nine seater mini-bus and a small motor launch is envisaged for 1972-73 and 1973-74 respectively.

#### Approach to the V Plan.

As long as these islands remain closed to foreign nationals, a large portion of the tourist potential of these islands will remain untapped. Any plan for development of tourism in these islands has necessarily to take into account this vital factor before working out any scheme of tourism in this Territory. A decision will have to be taken whether this Territory should continue to remain closed to Foreign nationals or whether in the interest of development of tourism some areas atleast should be opened up. Once this is decided, it may be possible for the Tourism Development Corporation to play an active role in the development of the area from the Tourists angle. There is tremendous scope for developing these islands to attract tourists from all corners of the

world and to exploit the potential for fishing water sports etc. An average Indian tourist will not be able to afford such diversions, but these are attraction enough for any affluent tourists. What is needed is a proper appreciation of the potential of this Territory in the field of tourism and formulation of a suitable policy and schemes to exploit this potential.

Broad outline of the programme proposed for the Fifth Plan.

Pending finalisation of the policy proposed above, the following programmes are suggested for implementation during the Fifth Plan, with a total outlay of Rs.100 lakhs.

1. Establishment of a Directorate of Tourism, Information and Publicity -

The publicity wing of the Administration working under the Development Commissioner has been looking after tourism development programmes. It is proposed to set up a full-fledged organisation under the charge of a Class I officer assisted by necessary complementary staff such as Information Officer, Sub-Editor, Tourist Guides etc. for promotion of Tourism, Information and Publicity services.

2. Construction of inexpensive Tourist Lodges (Hostels) at Port Blair, Rangat, Mayabunder and Diglipur to accommodate the tourist/student parties belonging to the Low and Middle Income group -

The tourists coming to these Islands would require the basic comfort of accommodation, food and transport. Emphasis will, therefore, have to be laid on providing these facilities.

There is no suitable accommodation at present at Port Blair and other places where large parties of



tourists and students can stay. It is, therefore, felt necessary to construct Tourist Lodges for 100 persons at Port Blair and 50 persons at Rangat, Mayabunder and Diglipur.

3. Construction of a Swimming Pool at Port Blair.

The proposal for construction of a swimming pool at Port Blair during the Fourth Plan was dropped. The same is necessary to be constructed during the Fifth Plan.

4. Purchase of more Mini Buses & Tourists Launches -

It is proposed that four Mini Buses and a few tourist launches/paddle boats should be purchased for the use of tourists.

5. Development of Picnic Spots - Places of tourists

interest in these islands should be further developed with the amenities of boats, tents, sunshades etc.

6. Reservation of Rowing/Boating areas for Tourists -

Certain very good areas such as Junglighat Bay, a nallah between the Govt. Degree College and Ramkrishna Ashram at South Point are proposed to be developed as Rowing/Boating and fishing areas for the tourists.

7. Construction of a Stadium at Gymkhana Ground -

At present there are no special facilities for the large number of spectators who gather in Gymkhana Ground to witness sports and games, cultural shows, exhibitions, fairs.

It is therefore proposed to construct a Stadium there during the Fifth Plan.

8. Publicity and Propaganda -

To increase the tourist traffic in these Islands extensive publicity through the mediums of news - paper

pictorial publications, pamphlets, hand-outs, Post Cards and short film about the charms of Andamans would be necessary. The Directorate of Advertising and Visual Publicity and Film Division of the Ministry of Information and Broadcasting can extend all the help in this respect.

At present there is no standard hotel at Port Blair. It will be necessary to provide all incentives to private entrepreneurs to attract them to these Islands to open modern luxury hotels.

The cost of travel between the mainland and these Islands is prohibitively high. The tourists should be given certain concession in ship and air fares if tourism is to develop here. The matter should be taken up with the Shipping Corporation of India and Indian Air Lines.

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SOCIAL SERVICES

'Social Services' get the third priority in the Fifth Plan. In the Fourth Plan a total outlay of Rs.488.814 lakhs was set apart for Social Services. Of this 180.916 lakhs for education Rs.28.331 lakhs for health, Rs.8.728 lakhs for welfare of Backward classes. In the Fifth Plan, the outlay tentatively proposed is much more than what was provided in the Fourth Plan. The scheme proposed under social services during the Fifth Plan seek to effect sweeping improvements in the social amenities provided to the population of these Islands.

(A) Education:-

The Union Territory has already a high percentage of literacy 43.48%. The previous plans particularly the Fourth Five Year Plan brought about considerable expansion of the educational facilities available in these islands.

The following table shows the progress of education during the last few years:-

Year	Total Number of Institutions.	Enrolment			Total Number of Teachers.
		Boys	Girls	Total	
1951-52	25	1,394	551	1,945	69
1955-56	42	2,093	1,041	3,134	115
1960-61	83	3,684	2,142	5,826	208
1961-62	108	4,478	2,715	7,193	285
1965-66	121	6,061	3,977	10,038	421
1968-69	141	8,803	6,036	14,839	696
1971-72	167	11,014	8,040	19,054	1,011
1972-73	180	12,631	9,801	22,432	1,107
1973-74	190	14,675	11,793	26,468	1,279
1974-75	201	16,811	13,895	30,706	1,371
1975-76	206	19,107	16,227	35,334	1,457
1976-77	211	21,490	18,576	40,066	1,543
1977-78	216	23,840	21,028	44,868	1,623
1978-79	221	26,174	23,540	49,714	1,699

The number of schools in the Andaman and Nicobar Islands has been increasing rapidly. Form 25 institutions in 1951-52 we have 180 today and the number will go upto 201 during 1974-75. Similarly the number of teachers has gone up from 65 in 1951-52 to 1107 in 1972-73. At the end of the Fourth Plan total number of Junior Basic Schools will be 149 with an enrolment of 18,275 at the Primary stage. Total number of Senior Basic Schools will be 21 with 5,991 pupils at the Middle stage. Total number of Higher Secondary Schools will be 14 and the enrolment will be 2,702 at the Higher Secondary Stage. These figures truly represent the expansion in the field of education in these Islands.

Unfortunately the building programme has not been able to keep pace with this vast expansion and has lagged behind. At the end of the Fourth Five Year Plan the back-log is anticipated to be 40 primary school buildings and 130 class-rooms for Middle and Higher Secondary Schools, for which the anticipated expenditure comes to Rs.31.10 lakhs. As far as the teacher's quarters are concerned, the back-log will be 503 quarters of various types requiring an expenditure of Rs.96.05 lakhs. In addition to this expenditure a sum of Rs.5.00 lakhs will be needed for establishing new hostels and Rs.2.55 lakhs for construction of play-fields. Thus the total back-log for the Fourth Plan comes to Rs.134.700 lakhs.

This back-log is of a very high order and unless specific provision of a sum of Rs.135 lakhs is made available immediately it will not be possible to wipe out this back-log and start the Fifth Plan with a clean state. The building component of the Fifth Plan will be of the order of Rs.215 lakhs which in itself would be a stupendous task to accomplish. It will become clear from a perusal of the attached statement.

BUILDING PROGRAMME - BACKLOG OF FOURTH FIVE YEAR PLAN CARRIED OVER TO FIFTH PLAN

Particulars	Backlog of III Annual Plan.	Require- ment of IV Plan.	Require- ment under Crash Pro- gramme.	Total requ- irement of Fourth Plan.	Provision made during Fourth Plan.	Achievement during Fourth Plan.	Backlong of Fourth Plan.							
1	2	3	4	5	6	7	8							
<u>Scheme No.1:- Primary Education:-</u>														
New School Building.	14	3.360	25	6.000	8	1.920	47	11.280	21	5.040	7	1.680	40	9.600
Extension to Buildings.	-	-	*39	9.153	-	--	39	9.153	39	9.153	39	9.153	-	--
Quarters Ty.II	60	12.000	128	25.600	-	--	188	37.600	72	7.200	13	2.600	175	35.000
Quarters Ty.I	50	7.500	70	10.500	-	--	120	18.000	20	3.000	10	1.500	110	16.500
Constn. of Play-fields.	15	0.750	15	0.750	-	--	30	1.500	11	0.550	5	0.250	25	1.250
Total Primary Education.		23.610		52.003		1.920		77.533		24.943		15.183		62.350
<u>Scheme No.2 Middle Education.</u>														
New School Bldg.	-	-	1	1.500	-	--	1	1.500	1	1.500	1	1.500		
Extension to Buildings.	*24	3.600	40	6.000	-	--	64	9.600	52	7.800	14	2.100	50	7.500
Quarters Type III	-	-	62	13.640	-	--	62	13.640	-	--	-	-	62	13.640
Quarters Type II	23	4.600	61	12.200	-	--	84	16.800	40	8.000	22	4.400	62	12.400
Quarters Type I	6	0.900	19	2.850	-	--	25	3.750	10	1.500	4	0.600	21	3.150
Constn. of Hostels.	-	--	2	2.000	-	--	2	2.000	-	--	-	--	2	2.000
Constn. of Play-fields	4	0.200	14	0.700	-	--	18	0.900	-	--	-	--	18	0.900
Total Middle Education		9.300		38.890		--		48.190		18.800		8.600		39.590

	1	2	3	4	5	6	7	8
<u>Scheme No.3: Higher Secondary Education:</u>								
New School Buildings	-	--	410.000	-	--	4	10.000	2 5.000 2 5.000 2 5.000
Extension to Buildings	91	1.650	74 11.100	-	--	85	12.750	42 6.300 25 3.750 60 9.000
Quarters type -III	-	--	63 13.860	-	--	63	13.860	- -- - -- 63 13.860
Quarters type-II	10	2.000	10 2.000	-	--	20	4.000	20 4.000 20 4.000 - --
Quarters type -I	-	--	10 1.500	-	--	10	1.500	- -- - -- 10 1.500
Constn. of Hostels	-	--	3 3.000	-	--	3	3.000	- -- - -- 3 3.000
Constn. of Play fields	-	--	8 0.400	-	--	8	0.400	- -- - -- 8 0.400
Total Higher Secondary Education.		3.650	41.860	-	--	45.510	- 15.300	12.750 32.760
Grand Total - Education ANIS.		36.560	132.753	1.920		171.233	59.043	36.533 134.700

Approach to the Fifth Plan and broad outline of the Schemes

Schemes for the Fifth Five Year Plan have the following Salient features:-

1. Achievement of 100% enrolment in the age group 6-14 by 1976-77.
2. Establishment of a comprehensive College of Education for pre-Service Training for Primary, Middle and Higher Secondary Teachers and also for teachers for Pre-Primary classes and Physical Education.
3. Establishment of an Industrial Training Institute, a Model Comprehensive Higher Secondary School, 6 Model Primary Schools and an Educational and Vocational Guidance Bureau.
4. Establishment of a Museum, a Nritya Sangeet Academy and 10 Zonal Libraries.
5. Creation of a Planning Branch with a full-fledged Statistical Unit for data collection, compilation of statistics and futurological projection and planning of both quantitative and qualitative expansion of education.
6. Introduction of Post Graduate and B.Com. Classes in the Govt. College.

The following seven schemes at an estimated outlay of Rs.487.331 lakhs have been proposed for inclusion in the Fifth Five Year Plan of this territory.

Name of Scheme and Number.	Capital works (Buildings & quarters).	Non-Recurring Exp. (Furniture & equipment.)	Recurring exp. (Furniture.)	Grand Total Financial Requirement V Plan
1	2	3	4	5
1. Primary Education	54,66,000	1,50,560	49,22,900	105,39,460

	1	2	3	4	5
2. Middle Education	48,40,000	186000	3949500	8975500	
3. (a) Higher Secondary Education	60,20,000	100000	4209200	10329200	
(b) Technical Education.	4000000	1200000	800000	6000000	
4. University Education.	505000	60000	592084	1157084	
5. Comprehensive College Edn.	5000000	-	1374200	6374200	
6. General Programme.	50000	-	4280650	4330650	
7. Strengthening of Directorate of Education.	-	-	1026900	1026900	
Grand total	25881000	1696560	21155434	48732994	

It is proposed to ~~initiate~~ advance action for wiping out the back-log in building construction and also for new buildings for various schemes like comprehensive College, Industrial Training Institute and comprehensive model Higher Secondary Schools for the Fifth Plan. A Planning Cell will also be set up in the Education Department sufficiently in advance. The following gives in details of the scheme to be undertaken during the Fifth Plan:-

Pre-Primary Education.

There are only four Pre-Primary Schools functioning in this Territory, considering the need of Pre-Primary Education for about 6,000 students in the age-group of 3-6 years, it is proposed to open 50 Pre-Primary sections i.e. 10 per year during the Fifth Five Year Plan, to cater the needs of Pre-primary Education in these islands. A provision of Rs.5,70,000 has been made during the Fifth Plan.



Scheme No.1 - Primary Education.

At the end of the Fourth Five Year Plan, total number of Junior Basic Schools will be 14<sup>9</sup> with an enrolment of 18,275 at the Primary stage.

It is proposed to establish 30 new Junior Basic Schools, Total enrolment at the Primary Stage will be 29,100. It has been decided to achieve 100% enrolment in the age group of 6-11 years by the end of 1975-76. Besides 30 Junior Basic Schools, 6 model Schools and 15 Selected schools will be established and improvement of 145 Junior Basic Schools will be made. One Model school will be established in each Block and one in Head Quarter. Graduate Trained Head Masters and Teachers will be posted to these Model Schools for bringing over all improvement in the quality of Education.

Scheme No.2

Middle Education.

At the end of the Fourth Five Year Plan, total number of Senior Basic Schools will be 21 with an enrolment of 5,991 at the Middle Stage. By the end of the Fifth Five Year Plan total number of Senior Basic Schools will be 31. Total enrolment at the Middle Stage will be 12,839. It is proposed to upgrade 20 Junior Basic Schools to Senior Basic Schools i.e. 5 Schools every year during the first three years and 3 & 2 Schools in the Fourth and Fifth year of the Fifth Five Year Plan.

Scheme No.3(a)

Higher Secondary Education.

At the end of the Fourth Five Year Plan, total number of Higher Secondary Schools will be 14 with an enrolment of 2702 at the Higher Secondary Stage. By the end of the Fifth Plan total number of Schools will be 24. Enrolment at the Higher Secondary Stage will be 7,775. It is proposed to upgrade 10 Senior Basic S-schools during the Fifth Plan. 2 Schools will be upgraded every year. Besides 10 Higher Secondary Schools, one Comprehensive Model Higher Secondary School will be established in the first year of the Fifth Plan. The cost of the Comprehensive Model Higher Secondary Schools will come to Rs.20.00 lakhs.

Scheme No.3(b)

Technical Education.

With a view to providing facilities for technical Education to the pupils of this Territory, it is proposed to establish an Industrial Training Institute at Port Blair during the First Year of the Fifth Five Year Plan. This institute will provide training facilities for various trades. A sum of Rs.60,00,000 has been provisioned during the Fifth Plan.

Scheme No.4

University Education, Expansion of Govt. College, Port Blair.

The Govt. College came into being in the year 1967 with a view to provide facilities for higher education for the local inhabitants. The College offered facilities in Arts subjects only. By the first two years of its existence, the College functioned as an evening College and catered to the inservice students. Total number of

students at the end of three Annual Plans was 110 in B.A and 21 in the Pre-University. Total number of lecturers was 5.

During the three Annual Plans the main College building, Canteen and Library building was completed.

Fourth Plan aimed at the expansion of the Govt. College, from the year 1971-72, facilities for Science courses at Pre-Medical and B.Sc. 1st Year were offered. Total enrolment for Pre-Medical, B.Sc. 1st Year and Three Year Degree Courses in Arts was 19, 17 and 89 respectively. Music and Geography courses were introduced from the year 1971-72.

By the end of the Fourth Plan, total enrolment will be 251.

During the Fifth Plan, it is proposed to introduce M.A. Classes in Political Science, History and Hindi from the Third Year of the Fifth Plan. In addition to above commerce classes will be started at Degree level from the Third year. Necessary provision for staff and equipment has also been made. A provision for a separate Girl's Hostel has also been made during the Fifth Plan.

With a view to encouraging higher education among the local inhabitants, the Administration has been operating a Comprehensive Scheme under which scholarships are awarded to local students for prosecuting post higher secondary education, in educational institutions, for such courses for which facilities are not available in the existing Govt. College. A provision for Rs. 3,00,000 has been made during the Fifth Five Year Plan. Scholarships

worth Rs.60,000 will be awarded every year.

Scheme No.5

Establishment of a Comprehensive College of Education.

It is proposed to convert the existing Teachers' Training School in to a Comprehensive College of Education during the first Year of the Fifth Five Year Plan.

The College will provide training for Primary School, Graduate and Senior Teachers as well as Librarians Physical Education Teachers and Laboratory Attendants etc. The intake capacity of the College will be about 80 every year, out of which about 20 will be in Junior Diploma in Education, 30 for the Post-graduate Diploma in Education, 10 each for Diploma in Nursery Education, Physical Education and Library Science. The College will have four Departments at present namely:

1. Department of Education.
2. Department of Psychology.
3. Department of Science Education.
4. Department of Audio Visual Aids.

Total expenditure is estimated at Rs.63.742 lakhs during the Fifth Five Year Plan.

Scheme No.6

GENERAL PROGRAMME

An outlay of Rs.43.306 lakhs is proposed for the fifth Plan under the Scheme.

Scheme No.7

Strengthening of the Directorate of Education.

The scheme envisages for the strengthening of the Directorate of Education by providing additional staff during the Fifth Five Year Plan. An outlay of Rs.10.269 lakhs is suggested for this scheme.

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B. Health

Much has been done under Plan to improve Medical and Health Services in this Territory. The population of Andaman and Nicobar has been increasing steadily. The population of this territory according to 1971 census was 1,15,133 as against 63,548 in 1961. The doctor-population ratio at present is 1:3386. The population of this territory at the end of the Fifth Five Year Plan would increase considerably. During the Fifth Five Year Plan provision for expansion of medical facilities to meet the demand of the growing population will, therefore, have to be made. The various programmes proposed to be taken up for expansion of medical facilities in this territory during the Fifth Plan period are summarised as under:-

Scheme No.1

Training of Nurses, Compounders, ANMs and Dais

This is a continuing scheme from the Fourth Plan. Eventhough, the target will be fully achieved during the Fourth Plan, more and more trained staff will be required during the Fifth Plan to man the additional posts of ANMs, Compounders, and Dais. There is shortage of trained personnel in the Medical Department. To overcome the difficulty of getting trained hands, it is proposed to train 67 candidates in ANMs course, 25 candidates in Compounders course and 25 candidates in Dais course, locally during the Fifth Five Year Plan.

Scheme No.2

Expansion of Medical facilities in rural areas.

This is a continuing scheme from the Fourth Plan.

Eventhough the targets fixed under the scheme will be achieved fully by the end of the Fourth Plan, still there will be inadequacy of medical facilities in the rural areas due to insufficient communication facilities and considerable increase of population in these islands on account of influx of population from the mainland in search of employment, settlement of refugees and ex-servicemen. Therefore, some more dispensaries/hospitals will have to be opened and some of the present dispensaries will be converted into 10 bedded hospitals, during the Fifth Plan. Opening of new hospitals, dispensaries and conversion of the present dispensaries into 10 bedded hospital is envisaged during the Fifth Plan.

a) Hospitals

1. Opening of a new 20 bedded hospital at Katchal with a separate 5 bedded isolation ward.

b) Dispensaries to be converted into 10 bedded Hospitals

1. Conversion of Havelock dispensary into 10 bedded hospital.

2. Conversion of Baratang dispensary into 10 bedded hospital.

c) 15 Dispensaries and 4 mobile dispensaries at the following places will be opened

- |                               |   |
|-------------------------------|---|
| 1. Bengali (Teressa)          | 1 |
| 2. Narial Tekri, Campbell Bay | 1 |
| 3. Nancowrie                  | 1 |

4. Little Andaman (at new Bengali-settlement area)	1
5. Haddo, Port Blair	1
6. Chouldhari (South Andaman)	1
7. Namnuaghar "	1
8. Herbertabad "	1
9. Caddle Gunj/Ferrar Gunj	1
10. Rangachang/Beadonabad.	1
11. Manpur(South Andaman)	1
12. Nayagarh(Oralkatcha)	1
13. One dispensary for Labour working on Grand Trunk Road.	1
14. Sabari (Rangat)	1
15. Karmatang (Mayabunder)	1
16. Rabindrapally(Diglipur)	1
17. Mobile dispensary	4

d) X-Ray facilities.

At present X-Ray facilities are available at G.B. Pant Hospital, Port Blair, Civil Hospitals at Car Nicobar and Rangat. One X-Ray plant at Diglipur Hospital will be installed shortly. In other outlying hospitals the cases which are required to be X-rayed are sent to Port Blair or to the nearest hospital where X-Ray facilities are available. In order to provide X-Ray facilities to the rural hospitals (including hospitals to be opened at Katchal during the Fifth Plan), it is proposed to purchase X-ray plants for the following hospitals during the Fifth Plan.

1. Campbell Bay Hospital
2. Little Andaman Hospital.



3. Katchal Hospital.
4. Bambooflat Hospital.
5. Billiground Hospital.
6. Long Island Hospital.
7. Mayabunder Hospital.

One Radiographer will also be appointed to handle these X-Ray machines in each of the above hospitals.

e) Construction of a 20 bedded TB Ward at Car Nicobar.

The present T.B. Ward and Isolation Ward at Car Nicobar is situated at a distance of about 1.5 KM from the main hospital. By keeping a ward of the hospital at such a distance, lot of inconvenience are experienced every day for visit of doctors, sending ration, medicines, maintenance of separate kitchen, separate staff, attending emergency cases and giving them better attention. All these cannot be properly attended because of the separation from the main hospital by long distance. To overcome the above difficulties it is proposed to construct a 20 bedded T.B. Ward in the hospital compound itself during the Fifth Five Year Plan.

f) Appointment of a Lady Doctor for rural area.

There is only one post of L.M.O. sanctioned for Middle and North Andaman. She is to tour the entire area which is rather a difficult problem for a lady. There is constant demand from the public for posting of a lady doctor at Bambooflat, Rangat, Diglipur, Nancowry and Campbell Bay hospitals.

As such it is desired to post one lady doctor and an Ayah for all the hospitals. Of the above 3-4 should preferably have post graduate diploma in Gynaecology and

obstetrics. This will avoid evacuation of seriously ill patients/<sup>by</sup> special boats the expenditure on which runs into thousands of rupees.

(g) Purchase of Ambulance for rural Hospitals.

At present Ambulance facilities are only available at Port Blair, Bambooflat, Car Nicobar, Rangat, Mayabunder and Diglipur hospitals. Similarly it is essential to provide ambulance facilities to other hospitals viz., Campbell Bay, Katchal (Hospital to be opened during Fifth Plan) Little Andaman, Billiground where motorable roads are available. Also there is a demand from the villagers of South Andaman for stationing one ambulance at Tushabad for immediate evacuation of serious patients. Moreover the present ambulance facilities at Rangat is considered inadequate due to increase of population in that area. Therefore, it proposed to purchase 5 ambulances during the Fifth Plan for the above places. Purchase of a Hover craft for evacuation of serious patients from outlying islands to GB Pant Hospital is also envisaged.

There is no arrangements for evacuation of serious patients from one place to the nearest hospital in Long Island area except the weekly ferry service or by chartering special boat. The Q.M. Stores etc. are also to be sent to outlying dispensaries through the weekly ferry services. The population of out station islands are increasing day by day due to various developmental activities in that area. The places like Long Island, Straight Island, Diglipur, Nancowry, Campbell Bay etc. are cut off by high seas and as such it will not

be practically possible to evacuate serious patients to G.B. Pant Hospital, Port Blair. Difficulties are also being experienced for sending medicines to outlying dispensaries located in the isolated area for want of suitable transport facilities. To overcome these difficulties, it is proposed to purchase a Hovercraft during the Fifth Five Year Plan or in the alternative a speed boat to serve as water ambulance. On the recommendation of the Steering Committee held on 10/10/1972 two speed boats will have to be purchased during the Fifth Plan instead of one.

h) Appointment of Specialists for Rural Hospitals.

At present there are 5 hospitals in the rural area having 30 beds and above. But only one surgical specialist has so far been appointed at Car Nicobar Hospital. Therefore, it is proposed to appoint one specialist each in the following hospitals during the Fifth Five Year Plan as recommended by the Government of India:-

Bambooflat, Nancowrie, Rangat, Mayabunder and Campbell Bay.

Scheme No.3 Provision of isolation ward to outlying hospitals.

The scheme for providing isolation wards in outlying hospitals will have to be continued.

Two isolation wards one each at Rangat and Nancowrie hospitals has already been provided and the construction of isolation ward at Diglipur is in progress. Similarly it is felt necessary to provide isolation ward during

the Fifth Plan to other hospitals viz. Campbell Bay, Car Nicobar, Little Andaman, Billiground, Long Island etc. for proper segregation and treatment of infectious diseases. It is also proposed to convert the present two bedded Isolation ward at Mayabunder into five bedded one during the Fifth Plan.

Scheme No.4: Establishment of Primary Health Centre.

At present there are 5 C.D. Blocks in this territory against which only one Primary Health Centre at Wimberlygunj is functioning which will be shifted to Tusnabad. The Diglipur centre is under construction and will be set up by the end of 1972-'73.

**According to the strength of the C.D. Blocks in this territory, there should be 5 Primary Health Centres. Therefore, 3 more 10 bedded Primary Health Centres (with sub-centres) one each at Kadamtala (Rangat), Arong (Car Nicobar) and Nancowrie (Location to be decided) are required to be opened during the Fifth Five Year Plan.**

Scheme No.5:- Extension to Diglipur Hospital.

At present there is one 20 bedded Hospital functioning at Diglipur which provides medical facilities to the extent of about 15,000 population of that area. The Nabagram (Kalara) village is situated about 20 miles away from Diglipur hospital. The present population of this village is about 6,000. On completion of Diglipur-Nabagram road the people of Nabagram will come to Diglipur area Hospital for medical relief. Further the population of Diglipur is also increasing day by day. Considering

the above facts, the present 20 bedded hospital at Diglipur is to be converted into 50 bedded hospital with separate Administrative Block, OPD etc. during the Fifth Five Year Plan.

Scheme No.6: Strengthening of G.B. Pant Hospital, Port Blair.

This scheme envisages the following:-

- (a) Providing of intercom facilities in All Medical Officers residence linking with G.B. Pant Hospital, Port Blair.

At present telephone facilities are only available in the residence of Director of Medical and Health Services, Senior Medical Officer, Assistant Director of Health Services and Assistant Director of Medical Services from the public connection. Other medical officers are not having telephone connection in their residence. Great difficulties are being experienced at present to contact the Medical Officers, Matron and Administrative Officer during the emergency. The matter becomes more aggravated when serious patients are admitted the staff on duty in the wards have to contact the doctors concerned very often especially in the night. It is not practically possible to send a messenger during the night to call doctors from their residence when the services of doctors are required to attend serious patients. It is, therefore, absolutely felt necessary to provide intercome telephone facilities in all Medical Officers, Matron and A.Os residence at Port Blair linking the same with hospital. The sanctioned strength of Medical officers for Port Blair hospital at present is 25. One 75 b line PAX

intercome telephone will be required. On the installation of a new 75 line PAX the existing ~~to~~ intercome can be given to some other department like Marine or Education.

(b) Installation of a 25 KV generator at G.B. Pant Hospital.

At present electric supply is being given to the G.B. Pant Hospital from the Public line. It has since been observed that the current supply to the hospital remain suspended for considerable time due to break down of power house occurs very often and this leads to great difficulties to patients and in doing other hospital work. Due to sudden failure of current during the night considerable inconvenience are being experienced in all wards when the area is plunged into darkness of all of a sudden. Moreover, due to low voltage the cases which require immediate X-Ray for surgery will have to wait till the voltage improves. Similarly Surgical operation are held up due to power failure. Stand by generator exclusively for the G.B. Pant Hospital with automatic switching on facilities is felt very necessary.

(c) Providing of a Philips mobile Surgical X-ray unit at G.B. Pant Hospital.

The present bed strength of the G.B. Pant Hospital is 262 (including 50 bedded T.B. and 20 bedded Isolation hospital) were as only one X-ray plant is available in this hospital for taking X-rays. In addition to the cases at Port Blair, the X-Ray cases from outlying hospitals are also being sent to Port Blair. While managing the work with the present one considerable

inconvenience are being experienced by the public as well as the staff due to the fact that the number of patients to be X-rayed is increasing day by day. Moreover no alternative arrangements can be made locally for taking X-ray if the present one goes out of order. Further the operation theatre does not have a separate X-Ray plant. Great difficulty is experienced when X-ray machine is required inside the operation room for various operations, investigation and ~~deflection~~ fractures.

(d) Appointment of Addl. Medical Officers in G.B. Pant Hospital.

The present sanctioned strength of Medical Officers of G.B. Pant Hospital is 25, out of which 4 G.D.O. Grade I Specialists have been attached to Eye, E.N.T. Dental and Paediatric sections.

This hospital is run round the clock and as such the Medical Officers are required to perform O.M.Os duties besides their daily duty hours. It is proposed to post 4 Medical Officers, 2 resident Medical Officers, 1 Gynaecologist and one Assistant to Gynaecologist(JMO) for the G.B. Pant Hospital.

(e) Providing of a Disinfection Chamber to G.B. Pant Hospital.

At present there is no arrangement for disinfection of hospital cots, Q.M. Stores etc., for want of a proper room. It is desired to construct one disinfection chamber for the purpose during the Fifth Plan.

(f) Purchase of Additional ambulances for  
G.B. Pant Hospital.

At present there are 2 ambulances in the G.B. Pant Hospital. While managing the work with the present 2 ambulances considerable inconveniences are being experienced by the public as well as the Medical Department. Out of the above two ambulances one will be condemned in the near future. Therefore, it is proposed to purchase 2 ambulance for G.B. Pant Hospital, Port Blair during the Fifth Plan.

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CENTRALLY SPONSORED SCHEME

Scheme No.1: National Smallpox Eradication Programme.

The National Smallpox Eradication programme was launched in the last quarter of 1962. The scheme so far was being implemented here by the existing staff of Health Department. Only a sum of Rs.4,000/- has been provided under this Scheme for 1972-73 for purchase of stores and there is no staff under the scheme. Though this islands being free from this disease it is proposed to continue and intensify the programme.

Here there are many isolated islands where settlement are in progress. But no vaccinators have been provided in these places for want of which NSEP coverage could not be achieved upto the standard. It is not possible to cover up all the area by the existing staff of Health Deptt. Moreover the population during the last 10 years have enormously increased but the staff position is the same as before. Therefore it is decided to establish a separate unit for N.S.E. Programme with full complement of staff during the Fifth Five Year Plan.

Requirement of staff.

Medical Officer	- 1
Sanitary Inspector	- 5 (One each for Mayabunder, Long Island, Campbell Bay, Little Andaman and one for Neil, Havelock, Oralkatcha and Kadamtala).
Lady Health Visitor	- 5 (One each for Long Island, Campbell Bay, Little Andaman, Kadamtala PGC, and one for Havelock and Oralkatch).
Vaccinators	- 5 -do-

Scheme No.2 Establishment of Health Education Bureau at Port Blair.

At present there is no Health Education Bureau in this Territory for promoting health Education activities. The Medical and Health Deptt. of this territory undertakes the Health Education activities through Sanitary Inspectors etc. in addition to their own duties. The Health Education programme will be a failure until and unless the Public are properly motivated and persuaded for which a separate unit is to be established with requisite staff. In order to gain success and make the programme really a Public one, it is felt essential to establish a Health Education Bureau at Port Blair consisting the following staff as prescribed by the Government of India, Ministry of Health and Family Planning,

Staff:	1. Training Officer	- 1
	2. Health Education Technician	- 1
	3. Artist-cum-Photographer	- 1
	4. Health Educator	- 1
	5. Duplicating Technician	- 1
	6. Packer	- 1

and  
stores and equipments.

Scheme No.3 Establishment of a Nutrition Clinic at Port Blair.

At present there is no full-fledged Nutrition Clinic in this territory. However, the work connected with Nutrition Programme is being conducted by the Nutrition Officer of the G.B. Pant Hospital with the help of one Sanitary Inspector and Laboratory Technician. While implementing the programme by the existing above staff the Nutritional Coverage could not be achieved upto the

standard. Therefore it is proposed to establish a Nutrition Clinic at Port Blair with full complement of staff during the Fifth Five Year Plan.

Staff: 1. Dietitian or Home Scientist - 1  
2. Field Investigator - 1  
3. Field Worker - 1  
4. Clerk/Statistical Asst. - 2  
5. Peon - 1

Scheme No.4. Establishment of a N.F.C.P. Headquarter Bureau.

At present there is an N.F.C.P. Unit consisting of one Senior Filaria Inspector and 3 Superior Field Workers functioning under non-plan programme under the supervision of the Malaria Officer, Port Blair.

Keeping in view of the Filarial endemicity in this territory especially Nicobar group of Islands, it is proposed to establish an N.F.C.P. Headquarter Bureau at Nancowry with full complement of staff as per staffing pattern of Govt. of India intimated vide their letter No. F.6-1/69-C&CD dt. 8-10-1970.

Addl. Staff for Headquarter Bureau.

1. Assistant Director (M.O) - 1  
2. Clerk - 1  
3. Laboratory Assistant - 1  
4. Peon - 1

For Control Unit.

1. Field Workers -10  
2. Insect Collector - 1  
3. Chowkidar - 1

Scheme No.5 Establishment of a District Family Planning Bureau.

Provision has been made in the Budget Estimate for 1973-74 for establishment of a District Family Planning Bureau in Andaman and Nicobar Islands consisting Head-quarter Family Planning Organisation, Urban Family Planning clinic and Rural Family Planning clinic for effective implementation of Family Planning Programme throughout this territory of Andaman and Nicobar Islands. If the above proposal does not materialise during 1973-74 the scheme will have to be included in the Fifth Five Year Plan.

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Schemewise approximate Financial implication  
(Fifth Five Year Plan)

Scheme No.1

Training of Nurses, Compounders,  
A.N.Ms and Dais. Rs. 1.690 lakhs

Scheme No.2

Expansion of Medical facilities in  
Rural areas. Rs. 87.720 lakhs

Scheme No.3

Provision of Isolation wards Rs. 6.870 lakhs

Scheme No.4

Establishment of Primary Health Centres Rs. 15.650 lakhs

Scheme No.5

Extension of Diglipur Hospital Rs. 8.340 lakhs

Scheme No.6

Strengthening of G.B. Pant Hospital Rs. 9.360 lakhs

Total Rs. 129.630 "

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Centrally Sponsored Schemes.

Scheme No.1

National Small Pox Eradication Programme Rs. 6.000 lakhs

Scheme No.2

Establishment of Health Education  
Bureau. Rs. 3.170 lakhs

Scheme No.3

Establishment of Nutrition Clinic Rs. 1.640 lakhs

Scheme No.4

Establishment of National Filariasis Control Rs. 6.070 lakhs

Programme-Headquarter Bureau

Addl. Staff for T.B. Clinic Rs. 1.110 lakhs

Total Rs. 17.990 lakhs

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(D) Water Supply and Sanitation.

Water Supply

Water supply schemes included in the Fourth Plan, can be classified into three main groups:

- (i) Improvement of water supply in Port Blair,
- (ii) Improvement to water supply in other places and
- (iii) Rural Water supply.

The Dhanikhari water supply system costing about Rs.263.50 lakhs in total (2/3 of the cost to be borne by the Andaman and Nicobar Administration) is to be completed. The Improvement of the Distribution system in Port Blair town consequent to the increase in the availability of water has also been taken up and is expected to be completed during Fourth Plan period. To meet the immediate requirements of water supply needs of the town before the Dhanikhari water supply scheme comes into existence, additional reservoirs were built. All schemes for improvement of water supply in Port Blair are expected to be completed during the Fourth Plan period. The expenditure upto August, 1972 under this scheme was Rs.141.60 lakhs and the total expenditure at the end of Fourth Plan is likely to be Rs.205.00 lakhs (Total allocation is Rs.165.00 + 50.00 lakhs).

A number of schemes relating to improvement of water supply in places other than Port Blair were taken up during Fourth Plan and except for these at Kamorta (Phase II) and Diglipur (Phase II), others are expected to be completed before the end of Fourth Plan. An expdr.

of Rs.8.10 lakhs (against the total allocation of Rs.10.00 lakhs) has been incurred upto August, 1972 and the expenditure at the end of Fourth Plan is likely to be Rs.13.00 lakhs.

This envisaged providing piped water supply to a number of villages and also ring wells in small villages and also all over the islands. Upto August, 1972, an expenditure of Rs.10.92 lakhs has been incurred (total allotment of Rs.1000 lakhs is available for Fourth Plan) and the overall expenditure during Fourth Plan is expected to be Rs.17.00 lakhs. The piped water supply schemes in progress are expected to be substantially completed and about 80 ring wells are also likely to be completed during Fourth Plan.

#### Approach to the V Plan

As already explained, some of the schemes taken during Fourth Plan are likely to be continued during first year of the Fifth Plan also and a sum of Rs.5 lakhs will be required for their completion.

In addition new schemes will be taken up for extending water supply facilities to hitherto unattended

#### Broad outlines of the proposals for the V Plan

##### (i) Piped Water supply to rural and semi-urban places

Though Dhanikhari water supply scheme caters to the population living inside the Municipal area of

Port Blair, there are a few villages near Port Blair which are not served by this system. Certain storage reservoirs which are at present serving Port Blair town may become surplus after the completion of Dhanukhari scheme. The availability of storage in these reservoirs could be profitably utilised to serve the needs of adjoining villages. These schemes could be investigated and executed during Fifth Plan. An amount of Rs.10 lakhs could be provided for these schemes.

The pipe line from the Dhanukhari dam has some spare capacity over and above the requirements of Port Blair and so a small quantity of water could be made available to the villages enroute. During discussions, M.E.S. Engineers who are executing the projects, suggested that three 'Tee' junctions could be provided in the line, one at Sippighat junction, one at Garacharma to serve the satellite township and the third one in between Garacharma and Sippighat. A maximum quantity of 3 to 4 lakhs gallons may be tapped enroute and the cost of providing treatment plant for piped water supply to villages is likely to be Rs.10 lakhs.

At present, chlorination of water is being done by adding bleaching powder solution manually. It was felt that this arrangement may be replaced by mechanical chlorinators for fairly big size water supply schemes like Rangat, Mayabunder, Diglipur and Car Nicobar. A sum of Rs. 2 lakhs will be required during the Fifth



Plan for this purpose.

(ii) Other schemes of rural water supply.

Based on the felt needs of various places, the following schemes are to be executed during Fifth Five Year Plan:-

(a) Water supply to villages from Ferrargunj to Ograbraj.

A scheme costing about Rs.10 lakhs for taking water from a source near Miletalak to serve the villages upto Ograbraj has been examined in detail. This could not be taken up now because of want of funds during Fourth Plan.

Approximate cost - Rs. 10 lakhs.

(b) Improvement of water supply at Wimberlygunj.

Though at present the Wimberlygunj township proper is served more or less satisfactorily, the adjoining villages and settlements are not having enough water supply. The present source is capable of supplying additional quantity required and the scheme to remodel the distribution system and extend it to the nearby settlements is proposed.

Approximate cost - Rs.3 lakhs.

(c) Improvement of water supply at Mannarghat.

A scheme costing Rs.1 lakh has already been prepared but is held up because of want of funds during Fourth Plan.

Approximate cost - Rs. 1 lakh.

(d) Providing water supply at Havelock.

At present, the settlements at Havelock are having only well water supply which proves to be inadequate during summer. A scheme for providing piped water supply from hill sources nearby camp No.6 will have to be investigated and executed during Fifth Plan.

Approximate cost - Rs.5 lakhs.

(e) Improvement to water supply at Kamorta.

The scheme for providing water supply to 1500 persons is already under execution at Kamorta. Recently, we have been told that the defence establishment is likely to be increased in the near future and so the necessity for augmenting the supply arises. It is proposed to raise the dam by 1 metre, to hold additional quantity of water.

Approximate cost - Rs. 1 lakh.

(f) Water supply at Baratang.

At present, water supply position in most of the villages in Baratang becomes very acute during summer months. A scheme is under execution for providing water supply to Nilambur settlement from a source near South Creek. However, this is quite inadequate to meet the growing needs of Nilambur as also the other settlements nearby. An investigation of the water sources in the islands has been done and in it has been found that a nallah near Loru Jig will be able to supply the requirement of most of the villages in the area. The scheme is under examination but final report is not yet ready.

The approximate cost of the scheme will be Rs.10 lakhs. This will serve all the villages in the island with a total population of about 4500.

Approximate cost - Rs. 10 lakhs.

(g) Piped water supply to Shantanu, Kadamtala.

Here also the problem has been examined and can be taken up during the Fifth Plan.

Approximate cost - Rs.3 lakhs.

(h) Water supply to extension of Rangat township.

The existing township at Rangat is already cramped and it has to expand. Unless the Administration agrees for acquisition of agricultural land near Rangat township, the extension has to take place on a site selected about 2 miles away. Water supply to this new township is to be provided from Rangat river only. The scheme is likely to cost Rs.5 lakhs.

Approximate cost - Rs.5 lakhs.

(i) Water supply at Kalighat.

Approximate cost - Rs.1 lakh.

(j) Construction of wells

Construction of additional wells in small settlements at a cost of Rs.5 lakhs is envisaged during Fifth Plan.

II) Sanitation:-

At present, improvement of storm water drains inside Port Blair is being financed out of plan funds under roads. In the congested part of town, most of the drains function as sullage drains also and from the

sanitation point of view these drains wherever they are katcha have to be converted into pucca ones so that there is no stagnation of dirty water. Similar situation is arising in places like Rangat where habitation exists on both sides of the road and roadside drain become sullage drains. In the absence of properly organised local bodies, the Administration has to look into these problems as well. It is proposed that some amount should be provided under Fifth Plan for improvement of sanitation in these places by construction of pucca drains.

- 1) Improvement of drains in Port Blair - Rs.10 lakhs
- 2) Improvement of drains in other settlements like Rangat, Mayabunder etc. Rs.5 lakhs.

### III) Water bound sewerage in Port Blair

The present population of Port Blair is 26,000 as per 1971 census and the projected figure in 1980 is 40,000. At present, except for the Government accommodation most of the private houses are having dry type latrines and with the improvement of water supply consequent to the implementation of Dhanikhari scheme, we may think in terms of converting these dry-type latrines into flush type latrines. Because of the undulating terrain, the scheme to cover the entire township will cost a huge amount but in the Fifth Plan, it is proposed to investigate and take up this work in areas where the population is congested as in Aberdeen Basti, Dignabad village and Bazar areas. An amount of Rs.10 lakhs will be provided for this purpose during the Fifth Plan.

To sum up, the recommended provision during the Fifth Five Year Plan will be as follows:-

- 1) Continuing scheme ... Rs. 5 lakhs
- 2) Piped water supply to rural & semi-urban areas ... Rs. 66 lakhs
- 3) Improvement to sanitation in Port Blair and other places by construction of pucca drains ... Rs. 15 lakhs
- 4) Investigation and provision of water bound sewerage system to congested areas of Port Blair at present having dry-type latrines. ... Rs. 10 lakhs  
... Rs. 96 lakhs

(c) Welfare of Backward Classes:

Out of the total population of 1,15,000 in the Andaman and Nicobar Islands, over 18,000 is accounted for by the Tribals. These Tribals are Nicobarese, Onges, Shompens, Andamanese, Jarawas and sentinalese. The various Tribes are at different stages of development. No uniform scheme can be applied to all the Tribals. The policy with regard to the development of the tribals should take into account their peculiar features and the different stages of development that they are in. There should be a smooth process of development so that the tribals ultimately achieve integration with non-tribals. The pace of change should not be so fast that the tribals are swept of their feet; nor should it be so slow that the developmental gap between the tribals and the non-tribals further widens.

(1) Nicobarese:- The Nicobarese who inhabit the islands of southern group of islands from Car Nicobar to Great Nicobar number 17,874 according to 1971 census.

They are leading a settled way of life. They are more numerous as also most advanced among the tribals in these islands. During the Fourth Plan period, Schemes for the development of coconut and arecanut plantations, permanent settlement of Nicobarese families of Car Nicobar in other islands, improvement of housing conditions, supply of poultry birds, additional facilities for education, promotions of games and sports, and improvement of water supply are being implemented for the Nicobarese.

The agricultural economy of the Nicobarese centres round the coconut and arecanut plantations. Demonstrations on improved methods of raising coconut and arecanut plantations in selected places have been held. The demonstrations have been largely conducted in the islands of Car Nicobar during the Fourth Plan. These demonstrations should be conducted in selected places in all the other Islands inhabited by the x Nicobarese. The Nicobarese have not as yet taken to the use of fertilisers. They are reluctant to purchase fertilisers. The policy of carrying out the demonstrations should be continued more intensively. Once the tribals are convinced of the utility of the improved methods of raising and maintaining the plantations they are bound to take to these improved methods. Some demonstrations on paddy crop were also conducted. The soil of the islands, however, does not appear to be suitable. It is very doubtful whether paddy will be raised in other such islands. It is

possible, however, to take up vegetables and spices in a limited way and demonstrations on vegetables and spices will be undertaken in these islands. Ornamental plants may also be tried.

The scheme regarding improvement of housing conditions of the Nicobarese has been very popular. Under this scheme, building materials, cement, timber and GCI sheets are supplied to the Nicobarese at ex-Port Blair rates and the cost of handling and transporting them to Car Nicobar is subsidised. Adequate funds should be provided during the Fifth Plan period for the scheme. The scheme may also be extended to other islands of Nicobar group of Islands.

Poultry keeping has not as yet caught the imagination of the Nicobarese. Efforts in this directions should, however, continue and improved varieties of birds may be supplied to the Nicobarese.

A good deal has been done for the education of the Nicobarese. There is a Higher Secondary School in Car Nicobar and a number of Middle Schools and Primary Schools in various islands. The tribals get additional facilities for education. These facilities include supply of free books, 2 merit Scholarships in each class in each School (one to a boy and the other to a girl) and additional stipend of Rs.10/- p.m. per student to those who stay in the hostels. This has been a very popular Scheme with the tribals and should be continued.

A Kala Sangeet School has been recently opened in Car Nicobar. It is felt that it should get more importance during the Fifth Plan. A well qualified Music and Dance teacher should be provided in the School. The School would serve to preserve the cultural heritage of the tribals. It will also encourage the tribals to imbibe the spirit of music and dance of the mainland, including that of the other tribals. The Nicobarese have taken great interest in games and sports. Volley-ball and Foot-ball are played in all villages. The Car Nicobar foot ball team has done extremely well in tournaments on the mainland. Village play grounds are improved under the Schemes of 'promotion of Games and Sports', which is being implemented during the Fourth Plan. Adequate funds should be provided for phased programme of constructing/improving play grounds in these islands. There should also be a provision for annual meet and tournaments by the Nicobarese in the Fifth Plan. They may also be encouraged to participate in tournaments on the mainland. A stadium may be constructed at Mus in Car Nicobar. The tribals will be willing to contribute in cash or kind towards the construction of the Stadium.

A scheme for improvement of water supply has been there in the Fourth Plan. The scheme could not be implemented smoothly because of communication difficulties and scattered nature of the islands. There is no water shortage in Car Nicobar. The problem exists in certain other islands. Wherever it is possible to dig wells, appropriate provision will have to be made.



For quite some time has been felt that Car Nicobar is over-populated. This island with a total area of 49 Sq. miles has a population of 13,504. Efforts were made to persuade the leaders of the tribals of this island to shift some people from Car Nicobar elsewhere. The tribals were, however, reluctant to do so. It has only been very recently that the tribal leaders have agreed to such shifting. About 5,000 acres of land on the southern coast of Little Andaman is being earmarked for the settlement of the tribals from Car Nicobar. Each family will be given 10 acres of land, out of which 5 acres will be suitable for plantation of coconut and arecanut, 2 acres swamp land suitable for paddy cultivation and 3 acres heavy soil of hilly land suitable for fruit plants. The tribals will clear the land themselves. The cost of transporting the families from Car Nicobar to Little Andaman and making temporary shelters for the Nicobarese when they are engaged in clearance of land will have to be provided by the Government. Roads, Schools, Dispensaries, water wells etc. can be provided from the appropriate Departmental plans. The cost of transporting the families, building temporary structures and payment of royalty to the Forest Department for the commercial timber that will require to be removed will have to be provided under the plan for Tribal Welfare. During the remaining part of the Fourth Plan, it is expected that 50 families will be shifted. During the Fifth Plan provision has to be

kept for the shifting of 250 families. The idea of settling the Nicobarese families of over-populated islands generally in other islands of Nicobar group will also be pursued.

(2) Onges: Onges are staying in Little Andaman. They are divided into 5 groups. The largest of the group is now staying around the coconut plantation in Dugong Creek. This coconut plantation on an area of about 200 acres has been raised by the Government for the benefit of the Onges. The Onges so far have been nomadic. They are coming round to a settled way of life with the plantation as a focal point of their economy. The coconuts collected by them are sold to a Branch of the Consumers' Cooperative Stores at Hut Bay. They are also collecting some dhup and honey. In order to protect the tribals from exploitation the Administration has fixed a minimum rate at which dhup may be purchased from the tribals by the Contractors. A social Worker of the Bharatiya Adimjati Sevak Samaj is looking after the welfare of the Onges. Grant-in-aid is given to the B.A.S.S. as a part of our programme.

With the large-scale settlement being planned by the Rehabilitation Department in Little Andaman, the interest of the various groups of Onges in this island need special protection. It is difficult to take measures for the protection of the tribals as they are scattered in small groups over different parts

of the island. During the Fifth Plan, settlement of Onges around Dugong Creek is envisaged. A 5 Kilometre belt around the plantation in Dugong Creek has been kept as a Onge reserve. The plantation will need to be extended so that a large number of tribals can depend upon this for their sustenance.

Fishing equipment to Onges have been provided. The tribals will have to be trained further in the use of fishing requisites of various types.

The Onge have been hunting wild pigs in the forests. The number of such pigs is dwindling. With the large-scale settlement being planned in this island, it is doubtful whether wild-pigs will at all be available after some time. Pig rearing may therefore be introduced to the Onges. Local variety may be given to them free of cost for purpose of rearing.

The educational needs of Onge children will have to be taken into account. The number of such children will be small and they will be of various age groups. A School of the conventional variety will not answer the need. A comprehensive school with a teacher who can take the special needs of the tribal children into account and teach children of various group will be required soon as the settlement gets under-way..

(3) Andamanese: There are 22 Andamanese only. They were leading a completely nomadic life. It was felt that the first requisite in the welfare of this tribe

would be to get them to lead a settled way of life. They have accordingly, been settled in Strait Island. They are given free rations and cloth. A grant-in-aid is given to B.A.S.S. for a Social Worker deputed to look after the welfare of Andamanese. A dispensary has been opened for them at Strait Island. One village Level Worker assists and guides them in taking up some plantation and kitchen garden. A semi-permanent accommodation has been given to the Andamanese at Government cost. The Andamanese go for pig and deer hunting. They also do fishing. It is felt that free supply of ration and cloth to the Andamanese should be progressively reduced so that they learn to stand on their feet. Arrangements may be made to train them in carpentry and basket making etc., and their produce including the deer and shells may be marketed through a Cooperative or a Governmental agency.

(4) Shompens: Shompens are scattered in various parts of Great Nicobar. This tribe generally lives in the forest hinterland. They lead a primitive, semi-nomadic life. Regular contacts have been every recently established with them. A Nicobarese V.L.W. has been specially posted in the area to keep contacts with them. Various working implements like dah, axe, cloth, spade etc. are being provided to the Shompens in the form of gifts which they can turn into good use.

As the settlement of Ex-Servicemen in Great Nicobar progresses and other developmental activities take place,

the economy of the Shompens is likely to be effected. A settlement will have to be planned for them also. A sufficiently large coconut plantation and an orchard for growing fruit trees like Jack Fruit, Guava, Tapioca, Papaya, Yams, Sapota, Banana, Tobacco, Sweet Potatoes, are recommended for the Shompens during the Fifth Plan. This could be in Laful area. Fishing lines and hooks have been provided to them which they are using with advantage. This activity will need to be extended. Throwing nets in large number may be provided to the Shompens and they be taught the use of these nets. They have shown interest in keeping poultry. Sufficient poultry birds may be supplied to them during the Fifth Plan. The B.A.S.S. or any other organisation of similar type may be given grant-in-aid for posting a suitable Social Worker to take charge of the settlement of Shompens of the area. In the alternative an anthropologist may be posted with headquarter in Laful area with wireless and adequate means of communication. Jooru V.L.W. may also be stationed in this area.

(5) Jarawas and Sentinalese: Jarawas and Sentinalese are hostile tribe. They are in very primitive stages even now. It has not been possible to establish any regular contacts with them. Jarawas live in deep jungles on the western side of Middle and South Andaman and Sentinalese are in North Sentinal island. A policy of dropping gifts has been pursued in relation to Jarawas. There have been reports that occasionally

these gifts have been picked up. The inveterate hostility <sup>of</sup> the tribe to strangers, however, continues. As the Andaman Trunk Road progress further through the areas frequented by them and traffic on the road increases, they are likely to withdraw. The policy regarding dropping of gifts may continue.

An expedition of North Sentinal island was planned during the early part of 1972, but could not be carried out. The expedition may be tried again when weather improves. Further policy with regard to Sentinalese can be decided after seeing the out-come of the expedition.

In order to evolve a continuous process of befriending these hostile tribes, a new idea of establishing an outpost at Flat Island on the western side of Middle Andaman island under the charge of an anthropologist/Social Worker may be pursued and implemented. The proposed outpost may need to be staffed by bush police personnel and lady social workers and be equipped with wireless facilities and dinghis and outboard motors.

General:

It is felt that since the Andamanese and Onges do not have a proper place at Port Blair to stay, a permanent building of two rooms may be constructed for them at Port Blair. Further, the Shompens living

in Great Nicobar are frequently visiting Campbell Bay in order to dispose of their produce. At present they have no arrangements for their stay at Campbell Bay. A permanent shelter for them may be constructed at Campbell Bay at a suitable place.

It was also felt that the present Nicobarese Home is inadequate in many ways and a new Nicobarese Home with proper beds and toilet facilities may be constructed at Port Blair.

It is also suggested that suitable administrative machinery may be created under Deputy Commissioner's establishment for implementation of Tribal Welfare Programme. The new establishment to be created may be headed by an officer of the rank of DANI Civil Service.

A tentative allocation of Rs.18 lakhs is proposed for the Fifth Plan under this sector.

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MISCELLANEOUS

The foregoing chapters clearly indicate that there will be tremendous increase in Plan activities in the coming years. It is only natural that the administrative machinery should be geared to cope with the increased volume of work. Rational planning of development programmes has an economy for the whole involves technicalities in proper appreciation of the various data collected, viewing them in the proper perspective, projecting requirements into the future and planning to meet such requirements. An ordinary administrative set up will be ill-suited to efficiently discharge duties of such technical nature. It is, therefore, proposed that during the Fifth Plan period a specialised Planning Unit should be set up under the over all charge of the Chief Commissioner to deal with plan formulation, its implementation and evaluation. This cell should consist of specialists in the field in addition to other administrative staff required for assistance in the work. A suitable scheme for this is being drafted in consultation with the Govt. of India.

With the growth in population and with the implementation of comprehensive schemes under 'Education' the population of the educated unemployed is increasing day by day. The Fifth Plan programmes have been drafted giving adequate emphasis on the generation of considerable

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employment potential and unless proper man-power planning is attempted at right from the initial stages, all plan is bound to go awry. It is, therefore, suggested that a specialised Man-power Planning Cell may be created as a necessary adjunct to the Specialised Planning Unit.

This Administration does not have a Publicity Deptt. yet. Lack of adequate publicity of the development programmes undertaken in this Territory has been one of the factors that have acted as a drag on the economy.

The need for an efficient publicity sector can hardly be over-emphasised in view of the Territory's geographical location. Under 'Tourism' it has been proposed to set up a full-fledged Tourist-cum-Publicity Bureau. Once this proposal fructifies the tasks under Publicity will be taken care of.

The Fourth Plan included a few schemes under 'Publicity' relating to distribution of transistorised community listening sets to villages, dissemination of information by establishment of Information Centres at various places, establishment of a photographic-cum-movie unit etc. It is proposed to continue this scheme in the Fifth Plan also on a larger scale. It is also proposed to invite the Films Division for adequate coverage of the developmental activities going on in these Islands.

With a view to enabling the people of these islands to acquaint themselves with the developmental programmes going on in the mainland, a scheme was included

in the Fourth Plan to organise conducted tours of 30 persons including tribals and agriculturists of the various places to the mainland every year. It is proposed to continue the scheme in Fifth Plan.

At present this Administration is having only a small Statistical Bureau with skeleton staff. It has not been possible for this Bureau to collect all relevant data concerning the islands' economy and as such planning future developmental programmes in the proper prospective has become difficult. It is proposed, therefore, that in the Fifth Five Year Plan, there should be a full-fledged Statistical Deptt. under a Class I Officer with the necessary complement of staff. Sub-units of this deptt. should be located at different important islands and co-ordination should be effected from the Headquarters at Port Blair.

Shortage of accommodation has been one of the pressing problems of this Territory. In the previous Plan, there were schemes relating to Low-Income group Housing Scheme, Village Housing Project and Accommodation for Industrial labourers. It has however not been possible to fully utilise the facilities offered under these, particularly, the 'Village Housing Project', owing to the assistance offered being too meagre to attract anyone. There was no scheme for development of housing on a larger scale, nor was there any plan to have a large scale housing project on the lines on which the Delhi Development authority and the Govt. of Kerala have evolved

schemes to tackle the problems. With the increased plan activities in the Fifth Plan this problem is bound to grow worse and a comprehensive scheme for construction of houses to make them within the easy reach of people particularly of those belonging to the low and middle income group, is envisaged. In addition, provision for housing colonies and slum improvements will be made in the Fifth Plan. A separate scheme for development of house sites particularly for landless agricultural labourers in the out-skirts of the town and urban and semi-urban areas will also be proposed for implementation in the Fifth Plan.

STATEMENT SHOWING THE SECTORWISE OUTLAY AND EXPENDITURE SINCE THE BEGINNING OF THE FIRST FIVE YEAR PLAN

Head of Development	1st Plan 1951-56		2nd Plan 1956-61		3rd Plan 1961-66		Annual Plan 1966-67		Annual Plan 1967-68		Annual Plan 1968-69	
	Outlay	Expr.	Outlay	Expr.	Outlay	Expr.	Outlay	Expr.	Outlay	Expr.	Outlay	Expr.
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>I. AGRICULTURAL PROGRAMMES:</b>												
(a) Agriculture production	-	-	20.000	11.162	53.947	33.575	8.639	3.290	7.511	2.689	6.000	3.517
(b) Land Development (Soil Conservation)	-	-	5.600	0.422	9.983	2.526	1.497	0.009	1.346	-	2.000	0.828
(c) Minor Irrigation	-	-	6.500	0.007	-	-	1.00	-	1.000	-	1.000	-
(d) Land settlement and Colonisation.	483.050	68.032	130.00	91.172	<del>100.350</del> 37.994	-	-	-	-	-	-	-
(e) Animal Husbandry	-	-	3.800	2.007	4.420	6.927	4.081	0.479	3.689	0.254	4.000	0.544
(f) Dairying & Milk supply	-	-	5.000	0.165	3.500	0.054	0.600	-	1.000	-	1.000	-
(g) Forests	-	-	80.000	12.374	56.820	43.985	13.460	7.267	8.872	9.161	10.000	12.076
(h) Fisheries	-	-	1.750	2.352	14.770	5.474	3.470	0.390	2.435	0.024	2.000	0.207
<b>Total</b>	<b>483.050</b>	<b>68.032</b>	<b>252.650</b>	<b>119.671</b>	<b>253.790</b>	<b>130.485</b>	<b>32.747</b>	<b>11.435</b>	<b>26.853</b>	<b>12.128</b>	<b>26.000</b>	<b>17.172</b>

	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
<u>ii. COOPERATION AND COMMUNITY DEVELOPMENT.</u>												
(i) Co-operation Development.	-	-	0.750	0.767	3.960	7.425	3.155	2.002	2.225	1.647	2.000	3.861
(ii) Community Development	-	-	10.210	11.598	25.020	20.315	7.085	6.363	7.228	4.937	6.000	4.103
(iii) Panchayats	-	-	-	-	3.000	2,277	1.030	0.300	1.000	0.300	1.000	0.362
Total	-	-	10.960	12.365	31.980	30.155	11.270	8.665	10.453	6,884	9.000	8.326
<u>iii. POWER</u>												
	-	-	2.500	0.921	14.350	11.521	9.100	5.929	24.260	24.149	15.000	14.160
<u>iv. INDUSTRIES</u>												
	-	-	7.000	3.193	14,760	10,362	2,170	1,547	4,135	2,075	3,000	2,526
<u>v. TRANSPORT &amp; COMMUNICATIONS</u>												
1. Roads	75.000	17.440	85.000	80.895	238.000	251.048	51.000	40.967	65.096	49.302	65.000	58.308
2. Road Transport	-	-	1.000	1.258	10.000	9.099	4.441	6.337	13.958	4.377	10.000	3.790
3. Shipping	-	-	154.000	99.007	263.000	59.643	7.202	26.387	22.978	6.338	20.000	23.174
4. Ports & Harbours	-	-	-	-	-	-	1.870	1.437	44.830	9.541	45.000	9.970
5. Tourism	-	-	-	-	8.000	3.246	0.832	0.025	1.615	-	1.000	-
Total	75.000	17.440	240.000	181.160	514.000	323.036	65.345	75.153	148.477	69.558	141.00	95.242
<u>vi. SOCIAL SERVICES</u>												
1. Education	-	-	27.400	11.016	56.760	57.892	14.400	17.130	25.450	7.765	25.000	12.835
2. Health	-	-	-	-	-	-	-	-	-	-	-	-
3. Water Supply	-	-	25.300	11.319	50.750	57.305	9.865	7.036	13.891	3.773	10.000	4.174
	-	-	-	-	-	-	7.000	5.304	11.900	11.919	10.000	16.789

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
3. Housing	-	-	32.920	23.863	16.000	0.694	1.372	-	3.100	0.377	4.000	0.319
4. Welfare of backward Classes.	-	-	1.000	0.464	6,500	4.296	1.120	0.628	1.907	0.470	2.000	0.577
Social Welfare	-	-	-	-	0.100	-	0.100	-	0.978	0.025	1.000	0.117
Labour and Labour Welfare	-	-	-	-	2.780	1.663	0.580	0.183	0.939	0.025	1.000	0.052
<b>Total</b>	-	-	86.620	46.662	132.890	121.850	34.527	30.281	58.165	24.354	53,000	34.863
<b>II. Miscellaneous.</b>												
1. Statistics	-	-	-	-	0.410	0.220	0.050	-	0.066	-	-	-
2. Information and Publicity.	-	-	0.600	0.435	3.000	0.450	0.600	0.176	1.745	0.108	1.000	0.249
3. Others (Govt. Press).	-	-	2.805	0.460	3.780	1.006	0.500	0.002	1.254	0.540	3.000	0.164
4. Local Bodies	-	-	-	-	10,360	7.117	2,000	1,000	2.985	1.647	-	1.110
<b>Total</b>	-	-	3.405	0.895	17.550	8.793	3.150	1.178	6.050	2.295	4.000	1.523
<b>Grand Total</b>	558.050	85.472	603.135	364.867	979.320	636.202	158.309	134.188	278.393	141.443	251.000	
										41,286		173.812
												38.149
										182.729		211.961

## STATEMENT SHOWING THE PROGRESS UNDER THE FOURTH FIVE YEAR PLAN.

Head of Departments	Fourth Plan		1969-72	1972-73	Total Column (4+5)	Proposed outlay for 1973-74.
	(Original)	(Revised)	Actual Expdr.	(Anticipated Expdr.)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b>I. AGRICULTURAL PROGRAMME.</b>						
1.1. Agricultural Production	25.400	28.487	13.354	7.250	20.604	7.883
1.2. Minor Irrigation	1.000	0.724	0.054	0.330	0.384	0.340
1.3. Soil Conservation	6.660	12.704	2.974	3.690	6.664	6.040
1.4. Animal Husbandry	15.730	31.088	4.824	8.192	13.016	18.072
1.5. Dairying and Milk Supply.	3.000	6.155	0.114	2.381	2.495	3.660
1.6. Forests	67.400	74.079	37.615	16.700	54.315	19.764
1.7. Fisheries.	6.250	5.908	1.670	1.500	3.170	2.738
<b>Total Agricultural Production</b>	<b>125.440</b>	<b>159.145</b>	<b>60.605</b>	<b>40.043</b>	<b>100.648</b>	<b>58.497</b>
<b>II. CO-OPERATION AND COMMUNITY DEVELOPMENT</b>						
2.1. Co-operation	11.800	22.047	10.392	8.278	18.670	3.377
2.2. Community Development	18.490	16.293	10.623	2.870	13.493	2.800
2.3. Panchayats.	2.610	2.400	1.200	0.600	1.800	0.600
<b>Total Cooperation and Community Development.</b>	<b>32.900</b>	<b>40.740</b>	<b>22.215</b>	<b>11.748</b>	<b>33.963</b>	<b>6.777</b>
<b>III. IRRIGATION AND POWER</b>						
3.1. Irrigation						
3.2. Flood Control						
3.3. Power	55.000	45.835	25.665	6.620	32.285	13.550
<b>Total Irrigation and Power.</b>	<b>55.000</b>	<b>45.835</b>	<b>25.665</b>	<b>6.620</b>	<b>32.285</b>	<b>13.550</b>

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>INDUSTRIES AND MINING.</u>						
4.1. Large and Medium Industries.	0	Nil.				
4.2. Mineral Development	0					
43. Village and Small Industry.	5.110	3.782	1.272	1.180	2.452	1.330
<hr/>						
Total Industries and Mining.	5.110	3.782	1.272	1.180	2.452	1.330
<hr/>						
<u>V. TRANSPORT AND COMMUNICATIONS.</u>						
5.1. Roads	425.000	462.843	225.143	116.000	341.143	121.700
5.2. Road Transport	31.053	38.209	16.729	10.500	27.229	10.980
5.3. Ports & Harbours.	233.400	221.278	106.429	66.246	172.675	48.603
5.4. Shipping	81.000	57.927	21.074	11.650	32.724	25.203
5.5. Tourism	3.750	3.351	2.351	0.350	2.701	0.650
<hr/>						
Total Transport and Communications.	774.203	783.608	371.726	204.746	576.472	207.136
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<u>VI. SOCIAL SERVICES.</u>						
6.1. General Education	105.000	180.916	94.932	39.051	133.983	46.933
6.2. Technical Education	0					
6.3. Cultural Programme	0	Nil.				
6.4. Health	26.198	28.331	17.807	5.218	23.025	5.306
6.5. Water Supply	235.000	253.863	156.713	44.000	200.713	53.150
6.6. Housing	14.959	12.846	3.464	3.500	6.964	5.882
6.7. Urban Development	0	Nil.				
6.8. Welfare of Backward Classes.	6.090	8.728	2,710	1.480	4.190	4.538



(1)	(2)	(3)	(4)	(5)	(6)	(7)
6.9. Social Welfare	1.000	1.669	1.052	0.370	1.422	0.247
6.10. Labour and Labour Welfare.	1.000	2.461	0.255	0.482	0.737	1.724
<b>Total Social Services.</b>	<b>389.247</b>	<b>488.814</b>	<b>276.933</b>	<b>94.101</b>	<b>371.034</b>	<b>117.780</b>
<b>MISCELLANEOUS</b>						
7.1. Statistics	0.350	0.133	0.022	0.026	0.048	0.085
7.2. Information and Publicity.	7.750	6.154	2.022	1.813	3.815	2.319
7.3. Local Bodies	7.000	8.449	4.449	2.000	6.449	2.000
7.4. Others(Govt. Press)	3.000	3.512	0.542	0.890	1.432	2.080
<b>Total Miscellaneous</b>	<b>18.100</b>	<b>18.248</b>	<b>7.035</b>	<b>4,729</b>	<b>11.764</b>	<b>6.484</b>
<b>Grand Total</b>	<b>1400,000</b>	<b>1540.172</b>	<b>765,451</b>	<b>363.167</b>	<b>1128.618</b>	<b>411.554</b>

APPENDIX -III

TENTATIVE OUTLAY PROPOSED FOR THE FIFTH FIVE YEAR PLAN.

I. AGRICULTURE PROGRAMMES (Rs. in lakhs)

Agriculture	Rs.400.000
Minor Irrigation	Rs.50.000
Soil Conservation	Rs. 200.00
Animal Husbandry	0
Dairying & Milk Supply	0
Forest	Rs.1362.000
Fisheries	Rs. 338.000
Agricultural Programme	<u>Rs.2450.000</u>

II. COOPERATION AND COMMUNITY DEVELOPMENT

Cooperation	Rs. 100.000
Community Development	Rs. 30.000
Kanchayat	Rs. 10.000
Cooperation and Community Development	<u>Rs.140.000</u>

III. POWER Rs. 60.000

IV. INDUSTRIES Rs. 45.000

V. TRANSPORT AND COMMUNICATIONS

Roads	Rs.945.000
Road Transport	Rs. 80.000
Ports & Harbours	Rs.428.000
Shipping	Rs.300.000
Tourism	Rs.100.000
Transport and Communications	<u>Rs.1853.000</u>

VI. SOCIAL SERVICES

Education	Rs.487.000
Health	Rs.130.000
Water supply & Sanitation	Rs.96.000
Housing	Rs.40.000
Welfare of Backward Classes	Rs.18.000
Social Welfare	Rs. 3.000
Labour & Labour Welfare	Rs.3.000
Social Services.	<u>Rs.777.000</u>

VII. MISCELLANEOUS

Statistics	Rs. 2.000
Information & Publicity	Rs. 10.000
Local Bodies	Rs. 20.000
Government Press	Rs. 8.000
Miscellaneous	Rs. 40.000
Grand Total	<u>Rs.5365.000</u>
Centrally Sponsored Schemes	Rs. 68.000
Central Schemes	Rs.611.000

APPENDIX - IV.

Sector/Items	Level of achievements.				
	1st Plan	2nd Plan	3rd Plan	Annual Plan	4th Plan.
(1)	(2)	(3)	(4)	(5)	(6)
<b>I. Agricultural production</b>					
1. Allocation (Rs. in lakhs)	-	20.000	53.947	22.150	28.487
2. Area under paddy (Hectare)	3748	6684	7054	7920	11,946 (10655 upto 1971-72)
3. Production of rice (MT)	3133	5988	8263	10671	19000 (13325 upto 1971-72)
4. Distribution of H.Y.V. Seeds (hect.)	-	-	-	10	302
5. Area covered under H.Y.V. paddy (hect.)	-	-	-	200	6940
6. Fertilizers distributed (MT)	-	97	222	150	305
7. Improved agricultural implements distributed (No.)	-	287	132	61	296
8. Pump set distributed (No.)	-	6	3	10	84
9. Barbed wire distributed (MT)	-	27	16	7	85
10. Procurement of tractor (No.)	-	-	-	-	4
11. Plant Protection equipment distributed (no.)	-	40	147	429	241
12. Addl. area covered under coconut (Hect.)	-	202	1162	399	660
13. Addl. area covered under arecanut (hect.)	-	140	300	93	254
14. Estt. of Soil Testing Laboratory (No.)	-	-	-	-	1
15. No. of soil samples analysed	-	-	-	-	5601
16. Estt. of Fruit Demonstration Unit. (no.)	-	-	-	-	1
<b>II. Minor Irrigation</b>					
1. Allocation (Rs. in lakh)	-	6.500	-	3.000	1.000
2. Area covered under Minor Irrigation (hect.)	-	-	-	-	100
<b>III. Soil Conservation</b>					
1. Allocation (Rs. in lakhs)	-	*5.600	*9.983	*4.843	12.704
2. Area brought under Soil Conservation (Hect.)	-	-	230	-	578

\* Including land development.

‡ Cultivable land brought under soil conservation.

(1)	(2)	(3)	(4)	(5)	(6)
<u>Animal Husbandry.</u>					
1. Allocation(Rs. in lakhs)	-	3.800	4.420	11.770	31.088
2. Veterinary Hospitals(No)	-	-	-	1	1
3. Veterinary Dispensaries (no.)	3	4	5	4	7
4. Vety. Outposts(No.)	3	3	11	15	18
5. Key village Block(No.)	1	1	1	2	2
6. Key Village unit(No.)	-	-	6	7	17
7. Artificial insemination Centres(No.)	13	13	13	1	1
8. Livestock population	29,000	38,000	42,700	-	1,15,000
9.					
<u>Forests</u>					
1. Allocation(Rs. in lakhs)	-	20.100	56.318	33.332	74.079
2. Addl. area brought under teak(hect.)	1	510	2182	1296	2150
(ii) Matchwood(hect.)	1	330	382	40	100
(iii) Padauk(hect.)	1	10	243	81	245
(iv) Cane(hect.)	1	1	-	-	405
(v) Bamboo(hect.)	1	1	-	121	202
<u>Fisheries:</u>					
1. Allocation(Rs. in lakhs)	-	1.750	14.770	7.905	5.908
2. Fish production(MT)	4	70	224	350	800(570 upto 71-72)
<u>C.D. Block</u>					
1. Allocation(Rs. in lakhs)	-	10.250	25.020	20.515	16.293
2. No. of CD Blocks(No.)	2	2	5	5*	5
<u>Co-operation</u>					
1. Allocation(Rs. in lakhs)	-	0.750	2.960	7.380	22.047
2. Societies(No.)	43	85	161	188	207(upto 71-72)

(1)	(2)	(3)	(4)	-240- (5)	(6)
<u>Power</u>					
1. Allocation (Rs. in lakhs) -		2.500	14.350	48.367	45.835
2. Install capacity (KW) 1100		1430	2304	-	4223(3053 upto Aug. '72)
3. Villages electrified (No.) 10		3	4	2	40(34 upto Aug. 72).
<u>Village and Small Industries.</u>					
1. Allocation (Rs. in lakhs) -		7.00	14.760	9.305	3.782
2. Artisans trained in various trade (nos.) -		62	192	40	147(upto 71-72)
3. State aid to industries - loan advanced to private industrialists (Rs. in lakhs) -		-	0.300	0.925	3.350(1.200 up to 1971-72)

\* One block remained closed for 8 months from 1.12.1968 to 1.8.1969.

Sector/items	LEVEL OF ACHIEVEMENTS.				
	1st Plan	2nd Plan	3rd Plan	Three Annual Plans	4th Plan.
<u>Transport and communications.</u>					
<u>I. ROADS.</u>					
Allocations(Rs. in lakhs)	75.000	85.000	238.00	181.095	462.843
Roads(Km)	166	183	339	427 (136)*	584.00 (239) *
<u>II. ROAD TRANSPORT.</u>					
Allocations(Rs. in lakhs)	-	1.000	10.000	28.399	38.209
1. Buses(No.)	5 Nos.	8 Nos.	15 Nos.	25 Nos.	57 Nos.
2. Central Bus Stations	-	-	-	-	1 No.
		* Andaman Trunk Road.			
<u>EDUCATION</u>					
Allocation (Rs. in lakhs)	-	27.400	56.760	64.940	180.916
1. Primary Schools(nos.)	37	76	108	118	149
2. Senior Basic schools/Middle Schools.	2	8	9	12	21
3. Higher secondary schools	1	3	3	7	14
4. Teachers Training School	-	1	1	1	1
5. Government College	-	-	-	1	1
6. Pre-primary Schools	-	-	-	2	4
7. Enrolment(Boys and girls)	3134	5826	10,038	14838	27219
8. Teachers	45	208	421	696	1101 (upto end 1972-73).
<u>MEDICAL.</u>					
1. Allocations(Rs. in lakhs)	-	18.000	35.750	33.756	28.331
2. Hospitals	4	8	9	10	14
3. Dispensaries	21	33	40	44	50
4. Beds	358	408	434	477	542
5. Primary Health Centre	-	-	-	1	2

	<u>1st Plan</u>	<u>2nd plan</u>	<u>3rd Plan</u>	<u>3 Annual plans</u>	<u>4th Plan.</u>
<u>Water Supply.</u>					
Allocations (Rs. in lakhs)	-	7.000	20.000	28.900	253.863
1. Capacity of reservoir for water supply in Port Blair (M. gallons) except Dhanikhari.	21	-	-	-	121
Dhanikhari	-	-	-	-	<u>1000</u>
					1121
2. Villages covered with piped water supply (No.)	22	-	-	-	47
3. No. of wells constructed	-	-	-	319	399

APPENDIX IV  
Percentage of Enrolment to Population

Age Groups.	Year	Population			Enrolment			Percentage		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
6-11 Years.	1969-70	6760	5200	11960	7248	5322	12570	107.2	106.4	105.2
	1970-71	7020	5600	12620	7332	5514	12846	104.4	106.4	105.4
	1971-72	7250	6000	13280	7520	5848	13368	103.3	97.4	100.4
	1972-73	7540	6400	13940	8654	7265	15919	115.0	113.4	114.2
	1973-74	7900	6800	14600	9730	8495	18275	125.4	125.0	125.2
	1974-75	7920	6920	14840	10875	9775	20650	137.0	141.0	138.0
	1975-76	8040	7040	15080	12158	1181	23339	151.2	158.8	155.0
	1976-77	8130	7160	15320	13120	12180	25300	160.7	170.1	165.4
	1977-78	8280	7280	15560	14120	13080	27200	170.0	179.7	174.8
1978-79	8400	7400	15800	15060	14040	29100	179.3	190.0	184.6	
11-14 years.	1969-70	1840	1312	3152	1695	961	2696	92.1	73.2	82.6
	1970-71	2380	1834	4214	1877	1190	3067	78.8	64.8	71.8
	1971-72	2920	2356	5276	2041	1307	3348	70.0	56.0	63.0
	1972-73	3460	2876	6336	2533	1687	4220	73.2	58.7	66.0
	1973-74	4000	3400	7400	3250	2241	5991	81.2	55.9	68.9
	1974-75	4120	3480	7600	3905	2813	6718	94.7	80.8	87.8
	1975-76	4240	3560	7800	4416	3359	7775	104.1	94.3	99.2
	1976-77	4360	3640	8000	5120	4155	9275	117.4	114.1	115.7



(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	1977-78	4340	3720	8200	5815	5135	10950	129.8	138.0	134.0
	1978-79	4600	3800	8400	6698	6141	12839	145.6	161.6	153.6
14-17 years.	1969-70	3160	2220	5480	809	429	1238	24.8	19.3	22.0
	1970-71	3520	2440	5960	1062	566	1628	30.0	23.2	26.6
	1971-72	3780	3630	6440	1184	672	1856	31.3	25.2	28.3
	1972-73	4040	283	6920	1444	854	2298	35.7	29.6	32.6
	1973-74	4300	2100	7400	1645	1057	2702	38.2	34.1	36.2
	1974-75	4440	3113	7620	2041	1307	3348	46.0	41.1	43.5
	1975-76	4580	3260	7640	2533	1687	4220	55.3	51.7	53.5
	1976-77	4720	3340	8060	3250	2241	5491	61.0	67.0	64.0
	1977-78	4360	3420	8280	3905	2813	6718	80.3	82.2	81.2
	1978-79	5000	3500	8500	4416	3359	7775	88.3	95.9	92.1

APPENDIX -VI  
MANPOWER REQUIREMENT DURING FIFTH PLAN

(1) Medical Manpower

The following qualified personnel in the specialised and supervising categories have been proposed to implement various schemes under Medical and Health Services:

Nature of requirement.	Required in which year of plan.						Total	Qualification.	Scheme No.
	1	2	3	4	5	6			
1	2	3	4	5	6	7	8	9	
1. Specialists.	-	3	2	-	-	5	M.B.B.S.	II & IV	
							M.S.C.H.S.		
2. Medical Officer C.D.O. Gr.II	1	4	3	-	-	8	-do-	II,IV,VI & I(C.S.S)	
3. Lady Medical Officers.	3	2	1	-	-	6	-do-	II	
4. Resident Medical Officer Gr.I.	-	2	-	-	-	2	C.H.S.	VI	
5. Gynaecologist	-	1	-	-	-	1	To be as- certained.	VI	
6. Training Officer-		1	-	-	-	1	C.H.S.	II of C.S.S.)	
7. Statistical Assistant.	1	-	-	-	-	1	"	III of C.S.S.	
8. Assistant Director.	1	-	-	-	-	1	"	IV of C.S.S.	

(Note: C.S.S. = Centrally Sponsored Scheme  
 C.H.S. = Central health service.)

The following subordinate staff are proposed to implement the schemes under medical and Health Services which may require special training:

Nature of requirement.	Required in which year of plan.						Total	Qualifications.	Scheme No.
	1	2	3	4	5	6			
1	2	3	4	5	6	7	8	9	
Wardmaster	-	-	1	-	-	-	1	Certificate in general nursing registered with N.C. of India.	II
Staff Nurses	5	9	11	-	-	-	25		II, III, V
Laboratory technician/Asstt.	1	3	3	1	-	-	8		II, IV & 4 of C.S.S.
Midwife/A.N.M.	6	2	1	-	-	12	21		II & IV
Radiographer	4	2	2	-	-	-	8		II & VI
Lady Health Visitor	2	1	3	2	-	-	8		IV & I of C.S.S.
Sanitary Inspector.	1	2	3	2	-	-	8		IV & 1 of C.S.S.
Health Educator	-	1	-	-	-	-	1		II of C.S.S.
Health Education Technician	1	-	-	-	-	-	1	II	II of C.S.S.
Artist-cum-Photographer	1	-	-	-	-	-	1		-do-
Duplicating Technician	1	-	-	-	-	-	1		-do-
Dietician	-	1	-	-	-	-	1		III of C.S.S.
Field Investigator.	1	-	-	-	-	-	1		-do-
Field worker	1	5	5	-	-	-	11		III & IV of C.S.S.
Insect Collector	-	1	-	-	-	-	1		IV of C.S.S.
B.C.G. Technician	2	-	-	-	-	-	2		V -do-
Compounders	11	11	13	1	-	-	36		II, III, IV, V of C.S.S.
Vaccinators	1	1	3	-	-	-	5		I of C.S.S.
X-Ray Attendant	3	2	2	-	-	-	7		II -do-
Electrician	-	1	-	2	-	-	3		VI -do-

Non-technical Staff.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Ward Attendants	4	10	10	-	-	24		II
Cooks	1	-	3	-	-	4		II & V
Dhobis	1	2	1	-	-	4		II & V
Sweepers	1	6	5	-	-	12		II & V
Mali	-	2	2	-	-	4		II
Chowkidars	-	5	3	-	-	8		II & V of C.S.S.
Ayahs	9	7	7	-	-	23		II & V
Peons	2	3	1	-	-	6		II & V and Scheme IV of C.S.S.
Barbers	-	2	1	-	-	3		II
Seacunny	-	-	-	6	-	6		II
Greaser	-	-	-	4	-	4		II
Oilmen	-	-	-	4	-	4		II
Clerk-cum-Store keeper.	-	2	1	-	-	3		II
Drivers	-	12	1	4	-	17		IV & VI
Motor Mechanics	1	-	-	-	-	1		V of CSS
<u>Boat Crew</u>								
Master Serang	-	-	-	-	2	2		II
Engineer	-	-	-	2	-	2		II

(ii) Education Manpower

Assistant Director of Education	1	-	-	-	1	2		VII
Dy. Inspector of Schools.	7	-	-	-	-	7		VII
Principals.	3	2	2	2	2	11		III & V
Vice principal	1	-	-	-	-	1		V
Head of the Deptt.	3	-	-	-	-	3		V
Senior Teachers	20	5	5	5	5	40		III & V
Graduate Trained Teachers, Secun- dary Education.	3	3	3	3	3	15		III

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Graduate Trained Teachers, Middle School.	20	20	20	20	20	100		II
Head Masters, Middle School	5	5	5	3	2	20		II
physical education Teachers.	2	2	2	2	2	10		III
Craft Instructors Secondary	2	2	2	2	2	10		III
Craft Instructors Middle schools	5	5	5	3	2	20		II
Superintendent	1	-	-	-	-	1		V
Librarians	2	2	2	2	2	10		III
Asstt. Secretary	1	-	-	-	-	1		VII
Accounts Officer	1	-	-	-	-	1		VII
Senior Investigator.	1	-	-	-	-	1		VII
Head Clerks	4	-	-	-	-	4		VII
Stenographers	15	-	-	-	-	15		V & VII
Office Asstts.	3	-	-	-	-	3		V
Lower Grade Clerks	5	-	-	-	-	5		V
Peon-cum-Chowkidars.	20	15	15	10	15	75		Primary, Middle & Secondary Schools. I & II and III & IV.
Sweepers	9	7	7	7	9	39		-do-
Daftries	5	2	2	2	5	16		-do-
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(iii) Agricultural Manpower including Soil Conservation, Forestry, Animal husbandry, Dairying and Milk Supply, Fisheries and Minor Irrigation etc.								
Director of Agriculture	1	-	-	-	-	1		XXII
Joint Director	2	-	-	-	-	2		XXII
Dy. Director of Agriculture.	4	-	-	-	-	4		I, III & VI Plant Protecti. & No. I Soil Co-nservat

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Divisional Mechanical Engineer	1	-	-	-	-	1		V
Divisional Irrigation Engineer.	1	-	-	-	-	1		Soil Conservation I of Minor Irrigation.
Zonal Agriculture Officers.	5	-	-	-	-	5		I
Entomological Officer(350-900)	1	-	-	-	-	1		VI
Mycological Officer(350-900)	1	-	-	-	-	1		VI
Senior soil Chemist.	1	-	-	-	-	1		VIII
Soil chemist(Micronutrient(450-950)	1	-	-	-	-	1		VIII
Senior Research Assistant.	2	-	-	-	-	2		VIII
Agricultural Marketing Officer	1	-	-	-	-	1		II
Agricultural Marketing Inspector.	3	-	-	-	-	3		II
Warehouse Manager	3	-	-	-	-	3		II
Seed Development Officer.	1	-	-	-	-	1		XXII
Assistant Seed Development Officers	2	-	-	-	-	2		XXII
Research officer (Horticulture)	1	-	-	-	-	1		XXIII
Research officer (Agronomy)	1	-	-	-	-	1		XV
Spices Development Officer.	1	1	1	1	1	1		XIV
principal	1	-	-	-	-	1		XVI
Instructors	6	-	-	-	-	6		XVI
Statistician	1	-	-	-	-	1		XX

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Statistical Investigator.							I, III, IV, VIII, X, XII, XIV, XV, XX, XXI and No. I of Soil Conservation No. IV-do-
Junior Research Assistant.					XIII, X	158	
Agri. Extension Officers.	74	21	21	21	21		
Farm Planners							(Grouping has been done as qualifications required are the same)
Agri. Inspectors							
Research Assistant							
Production Asstt.							
Soil Conservation Assistants.							
Junior Soil Conservation Asstts.							
Agricultural Demonstrators.	113	29	23	15	-	180	I, III, IV, VI, VIII, X, XII,
Field Assistants/Laboratory Assts.							(Total requirement is indicated here. Deputation to special branch of training will be done by the Directorate as per requirement). XIII, XVI, Schemes I, II, 34 of Soil Conservation and resettlement of Nicobari families.
Plant propagators	6	-	-	-	-	6	III, VI, VII, VIII, XII, XIV, XV and Schemes IV under Soil Conservation
Senior Agricultural Research Assistants.	19	1	1	1	1	23	
Senior Plant Protection Assistants.							(Directorate will select suitable candidates for training in the required branch well in advance).
Factory Managers							
Senior Agricultural Inspectors.							
Farm Managers.							
Soil Surveyors, Research Assistant Engineer.	7	1	1	-	-	9	III, IV, VI Scheme, No. of Soil Conservation.
Factory Manager (B.Sc. Agril. Eng. or B.E).							

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Surveyor-cum-Draftsman and Surveyors.	17	-	-	-	-	17		III & No.I & II of Minor Irrigation & III of Soil Conservation.
Soil Surveyors	8	6	5	-	-	19		No.II of Soil Conservation.
Inservice Staff	4	4	4	4	4	20		XVII
Agricultural Information Officer	2	-	-	-	-	2		XXV and Scheme No.I of Resettlement of Nicobari families.
Agriculture Officer.								
Chargeman	1	-	-	-	-	1		V
Personal Assistant (Technical)	1	-	-	-	-	1		XXII
Administrative Officer.	1	-	-	-	-	1		XXII
Accounts Officer	1	-	-	-	-	1		XXII
Assistant Engineers.	3	-	-	-	-	3		I of Minor irrigation.
Soil Conservation Officers.	2	1	1	-	-	4		I of Soil Conservation & No.I of Resettlement of Nicobari families.
Soil Survey Officer	1	-	-	-	-	1		II of Soil Conservation.
Research Officer	1	-	-	-	-	1		IV -do-
Asst. Agrl. Officers (Horticulture)	5	-	6	6	6	23		IV,VI,XVIII, XXI.
Asst.Statistical Officers.	4	-	-	-	-	4		XXI
Junior Engineer	8	-	-	-	-	8		No.I of Minor irrigation & III of Soil Conservation.
Librarian-cum-Superintendent	1	-	-	-	-	1		XVI



(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Agriculturist	1	-	-	-	-	1	IV	
Horticulturist	1	-	-	-	-	1	IV	
Assistant Horticultural Officers.	3	-	-	-	-	3	IV	
Engineering Supervisor	3	-	-	-	-	3	V	
Land reclamation Officer.	1	-	-	-	-	1	III of Soil Conservation.	

Requirement of manpower (Agricultural Sector)  
 Posts to be filled by promotion or deputation - Total requirement.

Truck Drivers	11	-	-	-	-	11	I, IX, XII, XV, XVI.
Jeep Drivers	15	-	-	-	-	15	I, III, V, VI, XII Minor
Mazdoors	631	70	95	70	75	941	Irrigation Scheme No. I Soil Consvn II All Schemes taken together.
Khalasis	26	15	15	10	-	66	Resettlement of Nicobari families Scheme No. III & I of Minor Irrigation.
Cleaners	76	-	-	-	-	76	V, VI, XVI.
Cook	1	-	-	-	-	1	XVI.
Artist	1	-	-	-	-	1	XX

Categories of Manpower required in Agriculture Sector to be filled by promotion/deputation or recruitment.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Superintendent	1	-	-	-	-	1		No. XXII of Soil Conservation.
Head Clerks	4	-	-	-	-	4		V Minor Irrigation. Scheme No. I Soil Conservation Scheme No. I & II.
Divisional Accountant	3	1	1	-	-	5		Minor Irrigation I Soil Conservation No. I.
Higher Grade Clerks.	44	3	2	1	1	51		I, V, VI, X, XII, XIII, XIV, XVI, XXII, Minor Irrigation I Soil Conservation. I.
Lower Grade Clerks	68	8	1	1	-	78		I, IV, V, VI, VII, XII, XIII, XIV, XV, XVI, XX, XXII, Minor Irrigation I. V, XXII.
Stenographers	3	-	-	-	-	3		V, XXII.
Store Keepers	22	5	5	7	-	39		V, VII, IX, XII.
Store Clerks	4	-	-	-	-	4		V
Librarian	1	-	-	-	-	1		XXII
Store Attendants	4	-	-	-	-	4		V
Daftries	5	-	-	-	-	5		XXII
Peons	56	3	4	4	1	68		I, IV, V, VI, VII, IX, XII, XIII, XIV, XV, XVI, XX, XXI, XXII, Minor Irrigation I Soil Conservation I, II.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Chowkidars	54	1	11	11	7	84	I, III, V, IX, X, XI, XII, XIV, XV, XVI	Minor Irrigation I Resettlement of Nicobar family I Soil Conservation I II, III, IV.
Weighmen	16	5	5	7	-	33	VII and XI.	
Gestetner Operator	1	-	-	-	-	1	XXII	
Projector Operator	1	-	-	-	-	1	XXI	
Press Operator	1	-	-	-	-	1	XXI	
Compositors	3	-	-	-	-	3	XXI	

Categories requiring Training (Agricultural Manpower) in the Industrial Training Institute.

Senior Mechanics Tractors	6	-	-	-	-	6	V, VI, IX.	
Mechanics	13	-	-	-	-	13	V, VI, XI, XXI	
Turner	1	-	-	-	-	1	V	
Welder	1	-	-	-	-	1	V	
Blacksmiths	3	-	-	-	-	3	V	
Carpenter	1	-	-	-	-	1	V	
Painter	1	-	-	-	-	1	V	
Machinist	1	-	-	-	-	1	V	
Volcniser	1	-	-	-	-	1	V	

FOREST SECTOR

Staff requirement to be met by promotion/recruitment/  
deputation.

1	2	3	4	5	6	7	8	9
Deputy Conservator of Forests.	5	1	-	1	-	7		
Asst. Conservator of Forests.	8	1	-	1	-	10		
Publicity Officer	1	-	-	-	-	1		
Asst. Publicity Officer	1	-	-	-	-	1		
Soil Chemists.	2	-	-	-	-	2		
Research Assts(soil)	2	-	-	-	-	2		
Junior Research Assistants.	6	-	-	-	-	6		
Research Assistants (Engineering)	2	-	-	-	-	2		
Forest Rangers	43	5	1	3	-	52	*(26)	
Deputy Rangers	84	21	1	6	-	112	*(56)	
Foresters	149	21	1	6	-	177	*(88)	
Forests Guards	362	97	4	13		476	*(238)	
photographer	1	-	-	-	-	1		
Artist	1	-	-	-	-	1		
Statistician	1	-	-	-	-	1		
Computer	1	-	-	-	-	1		
Recorders	2	-	-	-	-	2		
Assistant secretary	1	-	-	-	-	1		
Superintendents	2	-	-	-	-	2		
Head Clerks	4	-	1	-	-	6		
Higher Grade Clerks	15	3	-	3	-	21		

(1)	2	3	4	5	6	7	8	9
Stanographers	6	1	-	1	-	8		
Lower Grade Clerks	52	9	-	6	-	67		
Class IV Staff	72	5	-	4	-	81		

\* Indicates categories in which 50% of the requirement is to be met with by promotion and remaining 50% by direct recruitment.

Requirement (Forestry sector) to be met by promotion/recruitment.

Truck/Tractor/Loco								
Drivers	15	19	15	4	1	54		
Assistant Drivers	9	7	5	4	1	26		
Lascars	2	32	16	14	9	73		
Oilmen	-	2	2	2	-	6		
Cleaners	13	12	10	-	-	35		
Truckmen	4	2	2	2	2	12		
Jeep Drivers	13	4	2	1	-	20		
Operator	1	-	-	-	-	1		
Field Assistants	1	-	-	-	-	1		
Masters	-	1	1	1	-	3	L.C.T. & Boat.	
Serangs	2	30	14	10	8	64		
Seacunny	1	16	8	2	4	31		
Drivers	1	3	3	1	-	8		
Assistant Drivers	1	5	5	2	-	13		

Requirement (Forest Sector) to be trained in Industrial Training institutes:

Mechanical Foreman (Marine)	1	-	-	-	-	1
Head Draftsman	1	-	-	-	-	1
Draftsman	11	-	-	-	-	11
Tracers	10	-	-	-	-	10
Fitters-A	1	-	-	-	-	1
Fitters-B	2	-	-	-	-	2

The Chief Conservator of Forests may take advance action for training the above categories if the posts cannot be filled by promotion.

Manpower requirement of Fisheries Department:

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Director of Fisheries	1	-	-	-	-	1	Scheme Administration.	
Assistant Directors	2	-	-	-	-	2	-do-	
Skippers	-	12	-	-	-	12	Fisheries Project Port Blair and Campbell Bay.	
Engineers	6	2	-	-	-	8	I,II,III	
Technologists.	-	4	-	-	-	4	I and II	
Mechanics-cum-Operators.	18	-	-	-	-	18	I and II	
Refrigeration Engineers	2	-	-	-	-	2	I and II	
Skilled workers	30	-	-	-	-	30	I and II	
Deckhands crew	24	8	-	-	-	32	I and II	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Ministerial staff	4	4	-	-	-	8	I,II,IV	
Masters of Vessel	-	-	2	-	-	2	III	
Unskilled labour	-	50	-	-	-	50	I and II	

Requirement is typical to the department in as much as technical personnel is concerned. The proposed Schemes if approved for implementation will require advance arrangements for recruitment of trained personnel.

Requirement of Manpower on Animal Husbandry(Agriculture) by promotion/direct recruitment.

Farm Superintendents	2	-	-	-	-	2	I and IX	
Farm Managers	7	-	-	-	-	7	I,II,VII, VIII,IX.	
Director of Animal Husbandry.	1	-	-	-	-	1	XIV	
Deputy Director of Animal Husbandry.	1	-	-	-	-	1	XIV	
Veterinary Assistant Surgeons.	10	-	-	-	-	10	I,II,III,IV, V,XIII.	
Agrologist	1	-	-	-	-	1	VI	
Agri. Inspector	1	-	-	-	-	1	VI	
Technical Assistant	1	-	-	-	-	1	XIV	

Animal Husbandry(Office staff, Clerical) to be filled by promotion/recruitment:

Office Superintendent	1	-	-	-	-	1	XIV	
Higher Grade Clerks	10	-	-	-	-	10	I,II,III, IX,XIV.	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Lower Grade Clerk	15	-	-	-	-	15	I,II,III, IV,VI, IX,X,XIV	
Stenographer	1	-	-	-	-	1	XIV	
Peons	12	-	-	-	-	12	I,II,III, IV,VI,IX, X,XIV.	

ANIMAL HUSBANDRY

Requirement of personnel to be recruited locally

Stockmen	17	-	-	-	-	17	I,II,III, IV,VIII, IX,X,XI, XII.	
Milk recorder	1	-	-	-	-	1	I	
Jeep Drivers	9	-	-	-	-	9	I	
Tractor drivers	1	-	-	-	-	1	I	
Cleaners	6	-	-	-	-	6	I,V	
Bull Attendants/ Attendants	40	-	-	-	-	40	I,II,V, VIII,XII.	
Night Watchman	10	-	-	-	-	10	I,II,III, IV,IX,X,XI, XII.	
Compounders	5	-	-	-	-	5	XIII	
Dressers	3	-	-	-	-	3	XIII	
Power tiller Driver	1	-	-	-	-	1	VI	
Electrician	1	-	-	-	-	1	IX	
Plant Operator	1	-	-	-	-	1	IX	



Engineering Manpower required to implement various schemes under fifth Five year Plan to be filled up by promotion/recruitment/depuration.

Nature of requirement.	Required in which year of plan.					Total	Qualification.	Scheme No.
	1	2	3	4	5			
I	2	3	4	5	6	7	8	9
Bulldozer Drivers.	2	2	2	2	2	10		
<u>Drivers</u>								
Heavy duty V	5	5	5	5	5	25		
Light duty V	2	2	2	2	2	10		
Cleaners	4	4	4	4	4	20		
<u>Mechanics</u>								
Automobile	2	2	2	2	2	10		
Earthmoving machinery.	2	2	2	2	2	10		
Workshop	2	2	2	2	2	10		
Welder	1	1	1	1	1	5		
Electrician	2	2	2	2	2	10		
Wiremen	2	2	2	2	2	10		
Mistries	2	2	2	2	2	10		
Assistant Foremen, Workshop.	1	1	1	1	1	5		
Masons	10	10	10	10	10	50		
Blacksmith (fitters)	5	5	5	5	5	25		
Beldars	200	200	200	200	200	1000		

Requirement of forest Sector.

Rubber plantations and Red Oil palm Schemes proposed in Fifth Five Year Plan. Personnel to be recruited by promotion/recruitment.

Nature of employment.	Requirement		Total
	Rubber	Red oil Palm	
1	2	3	4
Chief Conservator of Forests.	1	-	1
Conservator of Forests.	3	1	4
Deputy Conservator of Forests.	6	2	8
Assistant Conservator of Forests.	12	4	16
Range Officers	30	8	38
Accounts officers	1	-	1
Assistant Engineers	3	1	4
Factory Superintendent.	3	-	3
Sales Officer	1	-	1

Personnel to be recruited by promotion or local recruitment where technical training is necessary.

Mechanical Engine driver	6	1	7
Drivers	34	11	45
Electricians	3	3	6
Blacksmiths	6	-	6
Mechanics	9	5	14
Helpers	12	1	13
Rubber makers	9	-	9
Asst. Rubber Makers	9	-	9
Factory technicians	3	1	4
Rangers	60	16	76

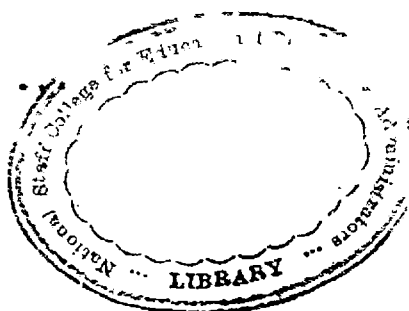
(1)	(2)	(3)	(4)
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Requirement of Forest Department.  
(Rubber and Red Oil Palm Schemes).

Personnel to be recruited by promotion or recruitment -

Head Clerks	11	3	14
Accountants	4	1	5
Lower Division Clerks.	21	8	29
Store keepers	4	3	7
Peons	13	3	16
Watchmen	9	5	14
Office Superintendent.	-	1	1
Stenographer	-	1	1
Higher Grade Clerks-		7	7

The above personnel requirement will be arranged by promotion from existing cadres and the remaining will be recruited locally as far as possible.



Sub. Notice of Systems Unit  
 Ministry of Educational  
 Planning and Administration  
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