## **CHAPTER - I**

## ECONOMIC PLANNING IN ARUNACHAL PRADESH AN OVERVIEW

"Arunachal Pradesh will rise from the east as a new star and become one of the best regions of our country."

Dr. Manmohan Singh, Hon'ble Prime Minister of India.

- 1.1 Arunachal Pradesh, the largest and youngest State amongst NE States, with a population of only 10.97 lakh as per 2001 Census inhabiting over an area of 83,743 sq. km, has a lowest population density of 13 people per sq. km. About two third of its population belongs to Scheduled Tribe (64.22%) from 26 major tribes and more than 100 sub-tribes. The State is known for its ethnic, linguistic, cultural, religious and physiographical diversity. The State possesses a heterogeneous demographic character with distinct variations from each other in regard to dialects, culture, social customs and ethos. The human settlements over the vast hilly terrain are highly scattered and sparsely populated and therefore their integration and involvement into the market economy is still a distant dream. As the State started its planning process from very scratch in most of the economic parameters, the State is lagging behind in all aspects of economic development in comparison to other States. This has left the State far below the all India average of development.
- 1.2 Arunachal Pradesh entered the field of effective planned development much later than most of the States of India. Arunachal Pradesh had to build from virtually a zero base. There were practically no roads, no schools, no hospitals and almost the entire territory was seriously deficient in food grains requirements. The isolation and lack of developmental infrastructural facilities in the area was so acute that even at the micro level it was not possible to make any appreciable investment in the initial plan periods. Private and corporate sector investments were non-existent. The plan investment started flowing through Five Year Plans and there from the annual plans took care of all socio-economic affairs as far as practicable under the contemporary situations. The planned economic development was started in Arunachal Pradesh with a paltry plan outlay of Rs. 300.00 lakh during First Five Year Plan. In the initial plan periods the priority sectors were communication, agriculture, education, health and cottage industries. With a low-income base, the State was constrained in mobilizing resources Until Chinese aggregation in 1962, the area remained isolated and developmental inputs were almost negligible in terms of the overall requirement of the territory.

## **Development Trends**

1.3 From the very inception of planned development priority was given to the agriculture especially to replace the practice of jhumming to meet the deficit gap in this sector. The basic objective in the agricultural planning was to introduce permanent cultivation wherever possible and simultaneously improvement of jhumming cultivation on scientific manner. For this the State Govt. provided subsidy towards land reclamation, minor irrigation, purchase of seeds, plough bullocks, improved cattle, pigs and poultry etc.

Besides these, technical advice and guidance, education and training in various fields were given to the farmers to wean away the jhumias from jhumming to permanent cultivation. Food production by the end of the Fourth Five Year Plan was 90,000 tonnes and 1382 hect. of land was brought under horticulture. The net area under cultivation during 1971 was 166836 hect., out of which 22000 hect. was developed for permanent cultivation by the end of 1973-74. The food production continues to receive priority with a view to bridging the gap between the level of production and food requirements for the entire population of the State. The level of food production at the end of 2006-07 is 2, 40,570 M.T. At the end of 8<sup>th</sup> Five Year Plan, an area of 55700 hect was brought under high yielding varieties. By the end of the 10<sup>th</sup> plan, the area under high yielding varieties was 67500 hect. Net area sown increased from 1.15 lakh hect in 1971 to 2.09 lakh hect in 2006-07. There has been an increased production of commercial crops like potato, ginger, turmeric, sugarcane etc. compared to last plan periods. Development of horticulture started in a scientific manner from 6<sup>th</sup> Five Year Plan. The production level of fruits in Arunachal Pradesh was 2887 MT during 1972-73 by the end of 1977-78 a total area of 2,176 hect. was brought under horticulture. The level of production of horticulture fruits has reached to 1, 39,277 MT with an area of 79,791 hect. upto 2007-08. During 1970-71 there was 6 nos. Government fish farms and 79.46 hect. was brought pisciculture. As of now, there are 15 nos. Government fish farms and fish production level is reached to 2770 tonnes. The achievement of fish seeds production is 30 million in terms of fry stage.

- 1.4 The vast forest resources and potential remained untapped during pre-independence period. Forest development activities started from the First Five Year Plan with an investment of Rs. 23.15 lakh. Similarly, during 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> plan periods, investment for forest activities was of the order of Rs. 34.02 lakh, Rs.42.50 lakh and Rs.158.06 lakh respectively. The developmental activities like artificial plantation, afforestation, avenue plantation and construction of forest roads etc. resulted in increase of the revenue from Rs.31.91 lakh during 1st Five Year Plan to Rs.200.00 lakh at the end of 4<sup>th</sup> Five Year Plan. The area planted and area covered under Apna Van till 2006-07 are 19519 hect. and 1185 hect. respectively. Under Cooperative sector though some societies were organized during 1<sup>st</sup> Five Year Plan, concerted efforts to strengthen the co-operative movement could be made from the 2<sup>nd</sup> Five Year Plan only. The number of co-operative societies increased from 37 in the Second Five Year Plan to 89 by the end of 4<sup>th</sup> Five Year Plan. Presently there are 468 Nos. registered Co-operative Societies in the State.
- 1.5 The basic infrastructure of communication in the State despite all-out efforts made since independence is poorest in the country. The total length of roads constructed during 1<sup>st</sup> Five Year Plan was only 400 kms and by the end of 4<sup>th</sup> Five Year Plan 1480 kms of all weather roads were constructed. Having started with a clean slate at the dawn of Independence having just a few dirt roads, the state, now boasting of 18,086.52 km of having roads today, has made considerable progress in development of surface communication. However, even today the State is having lowest road density at 21.9 km/100 sq.km.
- 1.6 Practically no efforts were made during the British regime to introduce formal education in erstwhile NEFA. There were only three schools with 50 students on the rolls in 1947. It was with the establishment of the Department of Education in 1947 that modern system of formal education was introduced with a sense of urgency in the territory. Schools were established where the demand existed, and in assiduous pursuance of the policy of expansion of education, Arunachal Pradesh since taken a big leap forward. During the 1<sup>st</sup> Five Year Plan 151 primary schools, 16 Middle schools and 2 Higher

Secondary schools were opened. The first degree college was set up during third plan. The number of educational institution went up to 455 in 1967 and further to 591 in 1973-74. At the end of 1977-78 the number of educational institutions stood at 1090 with enrolment strength of 54374. As of now, there are 2300 educational institutes in the State. Enrolment has been increased from 14164 in 1971 to 340965 in 2006-07. This is indeed an impressive achievement when compared with a position in 1947. Starting from low percentage of literacy, the State has achieved a significant progress. The literacy rate in the State increased from 11.29% in 1971 to 25.55 % in 1981 to 41.59% in 1991 and further to 54.34% (Male- 64.07%, Female- 44.24%) in 2001 The literacy rate for girls in 7-14 age groups has been increased to 47.60 % from 23.06% in 2001. In 2001 pupil-teacher ratios were 34:1, 27:1, 24:1 and 30:1 at primary, middle, secondary and higher secondary levels respectively. Percentage of single teacher primary school was 45.46% which is much higher than national average of 20.12 % in 2001. It is worth mentioning that every year the State Government spends around Rs. 20.00 crore for payment of stipend benefiting more than 60,000 students.

- 1.7 Arunachal Pradesh had only one hospital and three dispensaries at the time of independence. At the end of 5<sup>th</sup> Five Year Plan there were 17 hospitals, 48 dispensaries, 37 health units and 874 beds. The number of doctors was 180 against population of 5 lakh at the end of 5<sup>th</sup> Five Year Plan. The ratio of doctor and population was 1: 2800 during the referred period. Notwithstanding enormity of problem of physical accessibility and resource constraint, the sustained efforts made over the last successive plan periods, the State Govt. with its institutional network is extending health care facilities through 3 General hospitals, 12 District hospitals, 31 Community Health Centres, 78 Primary Health Centres, 376 Sub-centres, 37 Homeopathy dispensaries, 2 Ayurvedic dispensaries, 39 Dental units and 4 Hansen Disease Sanatorium. Thus, expansion of health services is one of the significant achievements in the post independence period.
- 1.8 Arunachal Pradesh has made remarkable achievement in providing water supply to its population. At the end of 4th Five Year Plan, 688 villages were covered under water supply schemes. Another 1100 villages were covered under drinking water supply at the end of 5<sup>th</sup> Five Year Plan. As per latest status survey the State has 5612 Nos. habitations, out of which 1359 habitations have been fully provided with drinking water facilities. The territory remained backward with regard to availability of electricity. Under Rural electrification programme 130 villages were electrified at the end of 1977-78. Till 2006-07, 1867 villages have been electrified.
- At the time of independence the per capita income of Arunachal Pradesh, the then NEFA, was one of the lowest. In the absence of data is is not possible to assess the actual level of income in the State via-a vis other States of the country in 1950s and 1960s. The estimation of domestic product of the State began in 1970-71 and estimation of districts began from 1993-94. In 1970-71 the per capita income was just 56.14% of per capita national income. On an average, during 1970s the State's per capita income was 63.38% of the national per capita income. From 1991-92 to 1995-96 the per capita income in Arunachal Pradesh remained higher than the national average. However, the growth of income in the State declined from 1996-97 onwards. The obvious reason for this is the ban on timber operation. For the period 1971-2003, the NSDP registered an average annual growth rate of 7.16% per annum. The growth rate was much higher in the seventies (7.07%) and in the eighties (7.81%) than in the nineties (4.54%). It implies that the growth rate of NSDP has shown a sharp decline since 1993-94.

- The per capita income (per capita NSDP) for the year 2005-06 is estimated at Rs. 23788 at current prices and Rs. 20037 at constant prices as against Rs. 14054 for the year 1999-00. It shows that the growth of per capita Income during the years from 1999-00 to 2005-06 is 69.26% at current prices and 42.57% at constant (1999-00) prices. It reveals from the estimate at current year prices for the year 2005-06 that the contribution of Primary, Secondary and Tertiary sectors to total GSDP is 28.11%, 31.90% and 39.99% respectively and their contribution to total NSDP is 28.63%, 31.75% and 39.62% respectively. The estimates at constant prices for the year 2005-06 reveal that the contribution of Primary, Secondary and Tertiary sectors to total GSDP is 24.77%, 32.86% and 42.37% respectively and their contribution to total NSDP is 25.07%, 32.59% and 42.34% respectively. The contribution of Agriculture (including horticulture and livestock) in GDSP/NSDP is found to be the highest in primary sector.
- 1.11 The highest contribution in Secondary and Tertiary Sectors is from Construction and Public Administration respectively. It may be stated that the tertiary sector has played the overwhelming role in sectoral contribution to the growth of the State's domestic product. The growth rate of tertiary sector is positive in all districts. The negative growth of forestry and logging is mainly attributed to the imposition of the Supreme Court's restriction on the timber operation since 1996 which resulted in the substantial revenue losses. The general stagnation of secondary sector needs to be addressed by improving the basic infrastructure and promoting entrepreneurship through promoting local entrepreneurs and inviting private investors from the outside the States. Though the performance of the primary sector appears to be encouraging in terms of productivity, at the same time a significant shift to the tertiary sector is observed. The tertiary sector is absorbing a large proportion of workers compared to the primary sector. However, the tertiary sector has now reached the super saturated point to absorb more manpower which has led to growth of unemployment in the State.
- 1.12 As mandated by Article 243ZD of the Constitution, the State Government has constituted District Planning Committee (DPC) in each district under the chairperson of Zilla Parishad. Constitution of DPC has paved the way for operationalisation of grass roots level planning, preparation of development plan etc. for each district. The modalities of devolution of administrative and financial powers are being worked out.
- 1.13 There has been improvement in the economic growth of the State and living conditions of the people as result of sincere efforts of the State Government over a period of time. Along with growth of literacy and income, the health status of the people has also improved. There has been a transformation in the livelihood pattern of the people. Various schemes for employment generation as well as beneficiary oriented poverty alleviation programmes has brought economic development in the rural area. However, much more needs to be done by utilizing available physical, human and economic resources in the State to further improve the quality of life of those living below poverty line.

## **Present Economic Scenario: Imperatives for change**

1.14 Arunachal Pradesh with its mountainous terrain is characterized by a very low economic growth rate. The State is suffering from impaired economic development due to inhospitable terrain, and disproportionately high cost of providing administrative, social and economic infrastructure. In Arunachal Pradesh the basic minimum services are to be provided to the people involving substantial high expenditure on infrastructure and other socio-economic services. The cost of construction and maintenance of infrastructure is

extremely high. The high cost of creating and maintaining infrastructure has severely limited the development of roads, power and other socio-economic infrastructure. Inaccessibility restricts movement of men and materials. The cost of construction is escalated not only because of high transportation expenses for transporting the construction materials, also due to non-availability of local skilled and un-skilled manpower. Road blockades caused by frequent land slides, result in an unwarranted delay in execution of works. Being located in the high precipitation zone, the working season is restricted only for five months i.e. from November to March every year. Remote and inaccessible areas of the State are suffering from the syndrome of isolation and alienation. In the absence of road connectivity to these areas, the cost of delivery of goods and services are extremely high.

- 1.15 The economy of the State is largely agrarian. The State has an estimated gross cropped area of 2.71 lakh hect. of which net area sown is about 2.09 lakh hect. About 60% of the cropped area is under shifting cultivation, which provides just a subsistence level of economy. Thus, even with a small population, the State remains deficit in food production. The State is yet to attain self-sufficiency in food grains production. Agricultural yields and traditional farming are mainly subsistence which have further compounded with increase of population, shrinking Jhum cycle and decreasing productivity of the land.
- 1.16 The primary sector has remained underdeveloped. The State can be rich in horticulture, minor forest produce and forest resources, but at present they are not being optimally utilized. Marketing has always been a weak link in the State for which the progressive farmers are deprived from remunerative prices. Despite vast natural resources, the secondary sector has been handicapped due to inaccessibility and remoteness of the area, lack of entrepreneurial skills, inadequate banking system and weak primary sector.
- 1.17 About 80% of population of the State lives in rural areas. The size of habitations in the hilly State is small and scattered over a large area. The most part of the State population lives in scattered villages away from the mainstream and their integration and involvement into the market economy will take more time. More resources are required to deliver basic essential services per habitation as compared to a State in the plains. Poverty is not chronic but acute. About 33.47% of the total population of the State is living below poverty line as against national ratio of 26.10 % in 1999-2000. In comparison to rest of the country, the decrease in poverty ratio has been slow because of difficulty in coverage of large areas under poverty alleviation programmes due to problem of accessibility and higher growth of population because of immigration from neighbouring State.
- 1.18 There is a dearth of basic physical infrastructure like roads, air connectivity, telecommunications and infrastructure development in social sectors like education, health, sanitation, nutrition etc. has also lagged behind. Arunachal Pradesh is isolated and remote within India, and to overcome such handicap, the State needs reliable road communication and air connectivity with rest of the country. The mineral wealth and tourism potential remain untapped. Rural electrification is inadequate.
- 1.19 The economy of the State is characterized by absence of an industrial base. The State has an undeveloped banking infrastructure. In Arunachal Pradesh the industrialization is yet to take off despite having vast potential of hydro power, minerals, raw materials, crude oil, agriculture and horticulture produces and tourism etc. There is no industry worth the name. Imposition of the Supreme Court's restriction on timber operation since 1996 resulted in closure of a few forest based industries in Arunachal

Pradesh and loss of substantial revenues. The response of public financial institutions is not encouraging as the recovery rate in industrial sector is very low. There is an urgent need to review of norms of providing loans by the nationalized banks and need some relaxation in norms in Arunachal Pradesh to boost industrialization in the State.

- 1.20 Despite the fact that Arunachal Pradesh has a rich heritage of producing a wide variety of traditional handlooms and handicrafts, the product and design upgradation and quality improvement are necessary before any large-scale market penetration is possible. Further, adequate thrust to training, skill up-gradation and manpower development is also equally important to achieve the cherished goal. Development of industry will address the issue of unemployment of youths, underemployment of local artisans and boosting of income all along. Keeping in view the lack of infrastructural facilities, communication bottlenecks and other constraints like difficult topography, geographical isolation and remoteness, there is an urgent need to encourage growth of industries in reducing the dependence on forest resources and in creating employment opportunities apart from ensuring all-round development.
- 1.21 A major problem in the backward State like Arunachal Pradesh is that the formal banking system is ill-suited to meeting the credit needs of the both formal and informal sectors. As far as credit deposit ratio is concerned it is only 17.25% as against All India average of 58.53% and lowest in comparison to other States of North Eastern region.
- 1.22 Inadequate economic development and backwardness of Arunachal Pradesh has a natural fall-out in terms of its capability to provide employment opportunities to its unemployed youths. The high rate of unemployment is due to lack of employment opportunities particularly in the context of absence of industrialization. While other States have played the role of facilitators for employment generation in various sectors/areas of development, employment in Arunachal Pradesh is solely dependent in Government organizations and the Government related activities. The scenario in the unorganized sectors is not encouraging for employment generation. As the absorbing capacity of manpower in the Government organizations has almost reached a point of super-saturation, unemployment problem has posed a problem to the State Government.
- Arunachal Pradesh is one of the Special Category States as the scope of internal mobilization of resources is limited in Arunachal Pradesh in view of low tax base. The low population density and poor infrastructural facility in the State is the primary bottleneck to enhance the scope of taxation. The economy being mainly agrarian in character, the scope for taxation in rural areas is basically nil. Due to continuous deterioration in the BCR position, the State has not been able to maintain the plan allocations that were approved for Annual Plans. There has always been necessity of diverting plan fund to meet the non-plan gap. The State Govt. has not been able to contain the growth rate of revenue expenditure corresponding to its revenue receipts as well as its non-plan expenditure inspite of best efforts. Given the state of economic backwardness, the State Government faces severe constraints in resource mobilization. A new concern has been arisen from the enactment of the Fiscal Responsibility and Budget Management (FRBM) Act by the State Government. Hence, the State requires support in terms of additional resources from the Centre. Despite concerted efforts of the Central and the State Governments, there continues to be a vast gap between the economic potential and its actual realization in the State. Though the development concerns of the State are pursued through Five Year and Annual Plans as well as those of other concerned Ministries of Govt. of India, the fruits of development have not been reached to the people living in the remote and inaccessible border areas of the State.

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- There is a growing evidence to show that inter-state disparities in various dimensions of development have remained undiminished in spite of overall development during more than five decades of planning in India. Of late, these have acquired alarming proportion. The dimensions of inter-state disparities can be gauzed from indicators like income, poverty and unemployment, agricultural and industrial development, infrastructure indicators and social service indicators. Net State Domestic Product (NSDP) is the single most important indicator of development of a State. The position of Arunachal Pradesh is marginally low in comparison to Mizoram, Nagaland, Sikkim, Manipur, Tripura and all India average. While advanced States have recorded smart annual rates of growth, backward States like Arunachal Pradesh have registered extremely poor rates of growth. In comparison to West Bengal and Kerala ,which have witnessed tremendous improvements in poverty levels, the percentage of population below poverty line of West Bengal and Kerala have witnessed tremendous improvements in poverty levels of Arunachal Pradesh has declined from 39.35 % in 1993-94 to 33 47% in 1999-2000 which is, in fact, higher than national average. Employment in Arunachal Pradesh is solely dependent in Government organizations and the Government related activities. The scenario in other unorganized sectors is not encouraging for employment generation. Unemployment problem has posed a grave concern to the State Government. This has resulted in growing sense of alienation and economic insecurity among the educated youths and has culminated in mushrooming of insurgency/ultras in a few districts.
- The agriculture sector is an important sector of the economy that has a direct bearing on overall growth. Punjab and West Bengal have recorded high growth rates in agricultural production and registered above average growth rates in agricultural productivity. The North Eastern States including Arunachal Pradesh have registered a relatively lower rate of growth. In terms of agriculture development, the State is not just lagging behind most others in the country but is unable to meet its own requirements. The yield levels of all major crops in the State are very low and far below their corresponding national average. Development of infrastructure is a sine qua non for rapid economic development and enables an optimal utilization of natural resources. In spite of such importance, glaring infrastructure disparities are visible in India. There exists wide variation in the availability of infrastructural facilities among various States. The States with a high infrastructure index are Kerala, Punjab, Gujarat and Haryana. Arunachal Pradesh is placed at the bottom of the rung. Although infrastructure development has been accorded top priority in the strategy of the State's economic development over the five decades of planning, Arunachal Pradesh is lagging behind the national average in most of the components of infrastructure. As per CMIE infrastructural index, 1992-93, the score of Arunachal Pradesh was only 44 as compared with the all India index of 100. The development of infrastructure, roads, power telecommunication in Arunachal Pradesh has not kept pace with that in the rest of the country. The railways has a token presence in Bhalukpung in the State. The abysmally low per capita consumption of electricity in the State reflects both poor quality of life and low level of economic activities, despite that fact that the State is endowed with phenomenal hydel potential. So far as industrial development is concerned, Maharastra and Gujarat continue to be the most industrialized States in India, whereas the States of North East particularly in Arunachal Pradesh the industrialization is yet to take off despite having vast potential of hydro power, minerals, raw materials, crude oil and tourism etc. In a backward and geographically remote State like Arunachal Pradesh private entrepreneurship are shy to invest due to communication bottlenecks and other deterrent factors. Local entrepreneurship is still to emerge.

- 1.26 From the point of view of social indicators also there exists among States a wide variation in the availability of social services like education, health and sanitation. There has been a continuous rise in the literacy rates in India. Amongst the States, Kerala has the highest literacy rate followed by Mizoram in 2001. In Arunachal Pradesh literacy rate is 54.34% (Male 64.07%, the Female 44.24%) as against all India average of 65.38%, which is lowest in the North East. The gender gap in literacy in Arunachal Pradesh is highest among the North Eastern region and Sikkim and above national average. Arunachal Pradesh compares poorly with the rest of India and its neighbouring States with respect to most health indicators also.
- 1.27 With the greater freedom in choice of opportunities that are available in the present development strategy due to globalization and given the many market imperfections that exist, the better-off States are in a position to attract more investment than backward States. There is an apprehension that under market-based economy, backward State like Arunachal Pradesh may remain outside the mainstream of the development and fail to reap the benefits of the higher growth tempo. Therefore, it is imperative to ensure improved opportunity for public and private investment in social and economic infrastructure.

## Rich Land Poor People: Challenges Ahead

- 1.28 Vast natural resources, particularly enormous hydropower potential, oil and natural gas and tourism offer a strong advantage to transform this strategically located State into one of the richest States of the country. And yet, on analysis of present economy of the State, following paradoxical and striking features emerge:
  - Vast natural resources and potential for growth in agro-forestry and horticultural sectors, exotic flora etc.
  - A bio-diversity hot spot.
  - Tremendous hydro power and tourism potential.
  - Rich heritage of traditional handlooms and handicrafts
  - The reserves of mineral resources are capable of supporting industries like Fertilizer plants, refractory units based on dolomite, Calcium carbide manufacturing units and cement plants, Gasification and coking plants based on coal deposits.
  - Despite above added advantages, Arunachal Pradesh continues to remain poorest of the poor State with poor and inadequate basic infrastructure, low economic growth and poor resource base.
- 1.29 The above paradoxical characteristics of the economy of the State have been revealed by the **Arunachal Pradesh Human development Report-2005** and **Draft State Development Report of Arunachal Pradesh (2007).** These two reports have analytically examined the above paradoxical features of the State and also highlighted some of the basic developmental issues/concerns and have recommended a number of policy options for accelerating the pace of development in the State.
- 1.30 **Arunachal Pradesh Human Development Report,2005** brought out by the Rajiv Gandhi University focuses on the current levels of achievements, the areas of concern, intra-district disparities, gender inequalities and the possible ways of progress with reference to crucial socio-economic indicators. The report reveals that although Arunachal Pradesh has shown a better record in improving its literacy rate and gross enrolment ratio,

yet it lags behind considerably, even with reference to medium human development States, not to speak of catching up with high human development States of India. Public expenditure on education has not made perceptible progress in realizing the desired goal. Health indicators reveal a continuous improvement in life expectancy and IMR, though the achievement is not commensurate with the investments made in the last succeeding plan periods. Equally distressing is the fact that majority of population continue to live under insanitary conditions and do not have access to life saving drugs. The gender related development indicators reveal the gender gaps in literacy rate, gross enrolment ratio and existence of a strong gender bias. The HPI for Arunachal Pradesh is estimated to be 39.47%, a value that is high by any standard. The HPI for the country as a whole is estimated to be 33.1% which is much lower than the HPI of Arunachal Pradesh. A high HPI implies that the benefit of human development has not spread sufficiently to impact human poverty in the State. Public expenditure on health has been considerably low. Similarly, Arunachal economy is characterized by inequality of income and consumption, although there is further scope for reducing inequality by poverty eradication programme targeted to the poorest of the poor. There is a wide gap between urban and rural areas and between the larger villages (in terms of population) and smaller villages. The first task of the Government should be to increase the road connectivity of the districts that have a relatively low HDI. The Government of Arunachal will have to continue with high public investment expenditure in the infrastructure sector (particularly in the remote and inaccessible rural regions of the State). At the same time, private investment particularly in the provisioning of education and health infrastructure needs to be encouraged together with community and local enterprise. A proper strategy of infrastructure development has to be framed, keeping in mind the special circumstances of each district. This strategy should ensure that the allocation of funds is directed towards the creation and maintenance of infrastructure facilities in the hill districts. State planners should give due attention to transmission and distribution losses of electricity and establish proper institutional facilities which can support and make investment effective. The Government needs to revive the community spirit of the local people and redefine the private sphere in the development process.

1.31 **The Draft State Development Report(2007)** of Arunachal Pradesh has identified the potential sectors and the associated constraints and suggested following policies options both in the potential sectors and the process variables so that a sustained economic growth is achieved in future:

#### **Transformation**

- Over a period of time social and economic transformation has taken place in the State. Individual ownership over cultivable land is gaining importance over community ownership. Land possession is now considered as a social status. Introduction of money economy has resulted in institutional transformation in land, labour and capital markets. Therefore various contradictions have emerged in the economy of the State.
- The traditional consumption pattern of the people has changed, as new products have entered into their consumption basket, which has resulted in increase in demand for cash. The traditional land ownership system and other economic institutions have become non-compatible with market system. Therefore serious contradictions have arisen due to non compatibility of traditional production system and institutions with those which are in conformity with market system.

• Due to increase in money demand, with virtually no technological change in agriculture, there is tremendous pressure on the government sector, which has resulted in a distorted growth of the tertiary sector.

## **Demographic Transition**

- The inter-district distribution of population is highly skewed; density is relatively high in the districts with some plains and extremely low in the districts situated in the upper reaches of the State.
- The growth of population in Arunachal Pradesh is much higher than that in the country. However during 1990s the population growth rate declined in the state due to the falling rate of in-migration from the rest of the country and falling rate of fertility.
- The fertility rate in the State is falling but the rate of fall is still very low. The mortality rate is however on a decline. Because of this, the natural rate of growth of population in the State is still higher than the national average.
- In spite of a clear falling mortality, the health status of the population in the State is worse than that in the rest of the country. Especially, in the remote region of the State the health conditions remain one of the worst not only in the country but also in the world.
- The relative cost of providing health service to an equivalent population in the State is two and half times more than the plain land population due to its topography.

### **Policy Measures**

- Expansion of the health services in the remote areas of the State.
- Public Distribution System should be strengthened to cover all people living below the poverty line.
- Family planning services should be integrated with the health services in the State.
- Precautionary measures against AIDS should be strengthened.

## **Economic Growth, Structural Changes and Work Force** Participation

- In 1970-71, per capita NSDP of the State was around 56.14 per cent of the national average. Due to better growth performance of the State in 1970s and 1980s the difference between Arunachal and National per capita income declined up to 1990-91. From 1991-92 to 1995-96, per capita income of the State remained higher than that of the country. After 1995-96, the per capita income of the State fell below the national average and the State's per capita income relative to the national income has since been getting lower and lower and became 84.64 percent of the national average in 1999-2000.
- Arunachal's NSDP growth rate was higher than that of the national income in the 1970s and 1980s. In the 1990s the rate was reversed and during 1994-05, growth rate was 2.35 per cent in contrast to the national average of 5.85 per cent per annum.
- During 1990-91 to 2001-02 the primary sector contributed 10.02 per cent to NSDP growth in contrast to a contribution of 36.79 and 54.36 per cent in 1970s and 1980s. This decline is mainly due to decline in the contribution

- of agriculture sector alone.
- Secondary sector's contribution has increased from 23.92 percent in the 1970s and 18.44 per cent in 1980s to 25.68 per cent in the 1990s. The better performance of this sector is due to better performance of electricity, gas and water supply. However, contribution of manufacturing and construction has declined.
- Tertiary sector's contribution to growth has gone up from 27.2 per cent in the 1980s to 64.30 per cent in the 1990s. Contribution by the non-infrastructural category of tertiary service (which includes public administration) to growth has increased from 14.11 per cent in the 1980s to 43.53 per cent in the 1990s. In the infrastructure category the contribution by transport storage and communication has increased from 0.79 per cent in 1980s to 14.44 per cent in the 1990s. In other category of the infrastructure like trade, hotel and restaurant, banking and insurance, the contribution has declined from 8.73 per cent to 7.26 per cent in the 1990s.

The above growth pattern has percolated down and is reflected in the outcome variables like employment, poverty and human development.

## **Employment**

- Dependency in agriculture sector in the state is high but it is declining. The share of agriculture in 1999-2000, among all workers, was 79 per cent, implying the dominance of agriculture in the State's economy on the one hand, and declining share of agriculture sector in the income is the most important disturbing trend in the economy of the State. The second important employment generating sector was public administration, education and community services.
- Manufacturing has a low share of 3 per cent, while construction has a share of nearly 5 per cent.
- Overall employment growth was negative for all workers and more significantly for the female workers during 1993-94 to 1999-2000.
- Unemployment rates are higher in the urban area than in rural areas.
- Negative employment growth was observed during 1993-94 to 1999-2000 in sectors like agriculture, electricity, gas and water supply, transport, finance and business services, public administration, education and community services. However, during the same period the unemployment rate has declined from 11.79 per cent to 6.16 per cent. This low rate of unemployment has to be seen in the context of the level of development and nature of the economy of the State.
- The Work Force Participation Rate (WFPR) in the State declined between 1993-94 and 1999-2000 as per the usual status employment for rural males.
- The decline of male WFPR is sharper in the case of urban males than that of rural males.
- There has been a significant decline in the FWPR of females in rural areas, while that in urban area, notwithstanding its low level, has remained almost constant.
- As per current weekly status (CWS) and current daily status (CDS) there has been a decline in WPR of both male and female workers, both in the rural as well as in the urban areas.
- In 1999-2000, out of the total workers, 76 per cent were self-employed;

- nearly 8 per cent were casual labourers and the rest regular salaried workers.
- Till now the major chunk of employment generated outside agriculture sector has been either in public administration or sectors like construction, which has strong linkages with government spending. Expansion of employment opportunities in the manufacturing sector has to be addressed with a proper policy framework.
- The problem of youth and educated unemployment, which exists along with shortages of skilled manpower in specific sectors and occupations, needs urgent attention, particularly because of its potential role as a source of social destabilization.

### **Policy Options**

In the light of the employment situation in the State as discussed above, the following options may be taken care of.

- There is a tremendous scope for the expansion of the rural non-farm occupations in the state. Therefore the state must come out with a rural non-farm sector policy such that many youth can take up the non farm sector as their career option.
- Some sectors like rural manufacturing and petty trading demand additional attention. Over the past decades, partly as a result of the growing demonstration effect of urban consumption patterns in the rural areas, there has been a phenomenal growth of these sectors in the rural areas.
- There is a clear case for special educational drives for specific marginalized groups such as villagers in inaccessible and border areas, traditionally marginalized ethnic groups, migrant casual labourers, tenants as well as those living in labour camps.

#### **Poverty and Inequality**

- Between 1993-94 and 1999-2000 the decline in poverty was 5.88 percentage points in the State and 9.87 percentage points at the national level. The percentage decline in number of poor persons during the same period is 2.5 points which is much more below the national average of 18.57 points. Thus in the economy of the State, povelly has not reduced much as compared to the national level.
- The Gini ratio or per capita consumption has increased in the urban area, where as in the rural areas it has declined. This trend is mainly due to high dependency of the rural population on Common Pool Recourses (CPR).
- Calorie deficit household in the urban areas has increased from 26.75 percent in 1993-94 to 60.05 per cent in 1999-2000. In the rural areas it has declined from 64.08 per cent to 48.71 per cent.

### **Human Development**

- The level of Human Development is low in the State.
- Health status, a dimension of human development, varies widely in the State.
- In literacy, the rate of progress in the State is one of the highest in the

- country. From almost a total illiteracy in 1947, the State reached a literacy rate of 54.34 per cent which is higher than that in Bihar and Jharkhand.
- The spread of literacy is not even and there is high inter-district variation.

### **Policy Measures**

- All-out steps should be taken to expand the health services to the disadvantaged section of the population those living below poverty line and those living in the far flung areas of the State.
- Immunization should be expanded to cover all the children in the State.
- The expansion of educational institutes should receive priority especially in the remote areas.
- Vocationalization of education should receive priority.
- Gender-sensitive measures such as gender-budgeting and collection of development indicators along gender lines should receive the attention of policy makers.

## Potentials Sectors for Development Power Sector

- The State has a potential of 50,000 MW electricity out of which only 178 MW has been exploited. Per capita power consumption in the State is the lowest in the country.
- Transmission and distribution loss in the State is one among the highest in the country.
- Harnessing the potentials in the light of the growing power demand both nationally and internationally is the need of the hour for the State.
- Power royalty will play a crucial role in the revenue of the State in near future.
- Development of power needs huge investment and it is beyond the capacity of the State government.

### **Suggested Policies**

- Public-private co-operation in power generation,
- Expansion of distribution network.
- Establishment of State Electricity Regulatory Commission

#### Natural resource base

- Coal: Major workable coal resource is available in Namchik-Namphuk coalfield with estimated reserves of 84.23 million tonnes, spread over an area of 35.5 sq km. Lack of good communication and remoteness from the nearest railhead is the main constraint of development of this coal field.
- Oil and natural gas: Available in kumchai, Diyun and Kharsang area in Changlang district. Here thirteen exploratory wells have been completed and exploratory work has been started.
- Limestone and Dolomite: Major reserves are found in Rupa (143 million tonnes), Tidding (140 million tonnes), Pangin (225 million tonnes). Rupa mining was started in the 1990s but was stopped owing to various reasons.

- Considering the growing demand of sted in the international market, this dolomite would be of importance in near future.
- Graphite: Major reserves are found in Deed village in Joram-Palin road (50 m thick), Bopi Tamen-Raga-Daporijo road (2.46 million tonnes) and Lalpani (71 million tonnes). Other mineral resources: Lead and Zinc, Ferro Silicon materials, Clay, etc. are available. Building materials like sand, bolder, marble. Quartzite, granite, etc. are also available in the State.

### **Policy Options**

- Since no economic feasibility study has been done for most of the mineral reserves of the region, sped lic studies need to be done.
- The abrupt stop of Rupa Dolomite mining was mainly due to denial by the military, for the truck movement at the night time. Therefore, coordination with the military is a must for exploitation of mineral resources in the region.
- Rangiya-Lakhimpur railway line is the supply line to the State. Therefore, in
  order to reduce the transport cost, this railway line must be converted into
  broad gauge in order to transport the mineral resources of the State to the
  various industrial areas in the country.
- The State must come out with a clearly defined mineral policy.
- Since the State is located in the seismic prone zone, for sustainable development the following policy may be followed:
  - a). Strict enforcement of building code,
  - b). Geotechnical studies of the urban centres, and
  - c). Hazard micro-zonation mapping.

#### **Forest Resources: Potential areas**

- Out of the total geographical area of 83743 sq km forest area of the state is 51540 sq km.
- The expected annual yield of timber is 74152.55 cubic metres, the annual yield of cane, bamboo and resin are estimated to be 1, 53, 36,851 Rmt, 2,78,162 (no) and 2,28,980 blazes.
- Different programmes like artificial plantation, aided natural vegetation, social forestry, joint forest management, Apanaban, fuel wood plantation under minimum need programme, minor forest production are in operation in the State.
- Bamboo: Total area under bamboo in the State is 1218.75 sq km and there is an additional potential or raising 8000 sq km area. There/ore bamboo based industries like paper mills is a potential area of development.
- Canes: The area under cane has not yet been estimated Studies suggest that 18 different species are available in the State. Keeping in view the demand of canes in other parts or the country, specific programmes need to be launched to develop this sector.
- Medicinal Plants: In the State around 500 species of medicinal plants have been identified by different agencies.
- Gums, resins, oils, and orchid ,Chir pine resin, dhuna, chitronela, agar, orchids and other different varieties of oil-yielding plants are abundantly available in the State. Out of 600 species of orchids 150 species are

- commercially important. All these forest products have not yet been fully exploited due to limited infrastructure availability in the State.
- Wildlife reserves: There are four elephant and two tiger reserves in the State. These reserves can be developed to attract tourists.
- Carbon financing: As per Kyoto Protocol, the state has enormous potential to develop the forest sector by participating in carbon financing scheme to generate forests. The State had around 1404.13 sq km of fallow land, cultivable waste land and area not available for cultivation. Thus the schemes related to carbon financing can be taken up to regenerate forest.

#### **Environment**

The State is endowed with abundant forest, mineral and water resources. The main concerns on environment are (i) intensification of agricultural practices, (ii) low level of sanitation facilities. (iii) Unplanned urbanization, vehicular growth and urban waste generation. Indoor environment in rural areas poses threat to people's health as they continue to use traditional fuels for cooking.

- Inadequate sewerage network and improper sanitation facilities lead to environmental degradation.
- Though the vehicular density is low (37 as compared to 53 at the national average), vehicular air pollution is expected to become a big concern.
- Urban solid waste generation is quite significant (12 tonnes per day in Itanagar only). Health care waste contributes around 5.58 percent to the urban waste.
- Jhuming is the main cause of soil erosion. The erosion rate is 91 tonnes per hectare per year in the State.
- Central Pollution Control Board has not found a single polluting industry in the State since the industrial base of the State is weak.
- Data on water quality of most of the rivers in the State is not available. However, the Brahmaputra that traverses through the state has been reported to exceed the accepted bacteriological level. This is an indication of the quality of river water of the State.
- The dominance of fuel wood as cooking fuel (87 percent in 2001) has implication for indoor environment and health condition of women and children.

### **Policy Options**

- Enforcement of different environmental laws is constrained by scarcity of manpower. Therefore financial, technical, and manpower requirements of the enforcement agencies need to be taken care of.
- Proper policies need to be formulated to phase out old polluting vehicles and inspection and maintenance of vehicles on road.
- Policies are needed to ensure management of urban, industrial and health care wastes. Here the involvement of private entrepreneurs and NGOs should be encouraged.

## Land use potentials

- Arunachal Pradesh is a mountainous state covering 83,743 Sq.km. A part of Himalayas, the State has more than two thirds of its area above 1000 m and about one third area above 2000 m.
- It has very low proportion of plain area. Below 5 degree slope, land including riverbed covers only 12,434 km and about half of the geographic area is either very steep or overhanging. Its typical geographic setup is responsible for the rain deficient areas in the western part and humid conditions in the east-central part.
- Land capability in the State is mostly of Class IV type which puts severe limitations on the choice of plants and requires special conservation practices. Nature has posed a great deal of hardship to the people of the State for pursuing any viable economic activity.
- These constraints may be overcome through a clear understanding of the geophysical parameters of altitude, slope, rainfall, soil and agro climatic suitability of different crops

### **Policy Options**

- The strength of the Stale is its varied agro climatic condition that is capable of producing a variety of horticultural and plantation crops such as apple, pear, orange, pine apple, kiwi, tuber crops like ginger and turmeric and vegetables. Cash crops like jute may be grown in per-humid areas of East Siang, Lower Dibang Valley and Lohit.
- Commercial cropping is still in infancy in the State. Hence the Government needs to facilitate the farmers with technical know-how and material inputs so that they can grow high-valued crops according to agro climatic suitability. Above all, a network of market should be promoted through non-governmental agencies with proper regulatory system or directly by the Government.

### **Potentials in Agriculture**

- Agriculture contributes 17 per cent to the GSDP and employs around 62 per cent of the workers in the State. However, a negative growth rate is observed in the recent years in agriculture sector.
- Positive points observed in the agriculture sector are (i) Net area sown is increasing, and (ii) Area under permanent cultivation is increasing and under shifting cultivation declining.
- The weak points are (i) low land availability, (ii) increasing marginalization of land holding, (iii) yield growth rate is not satisfactory, (iv) percentage of area under HYV seeds has remained constant (around 26.76 per cent) (v) institutional credit access of the farmers is very low (10%), (vi) ill-defined property rights and (vii) poor marketing network 1'01' the agricultural products.

On the basis of the above trends, following policy measures are suggested:

- (a) Development of a well-defined system of property rights over land.
- (b) Early completion of cadastral survey and evolving of an institutional

- mechanism to monitor and control land alienation through land reforms laws.
- (c) Articulation of a land lease policy.
- (d) Development of location specific farming technologies.
- (e) Creation of marketing network.
- (f) Land lease policy should be brought out by the Government.
- (g) Composite package which includes supply of high yielding varieties of seeds and seedling, supply of credit, and insurance to cover risk. Buy-back arrangement in the short run and setting of processing units in the long run should be the priorities of the Government.
- (h) Establishment of an effective data collection, processing and dissemination agency.

## **Transport and Infrastructural Development**

- Arunachal has the lowest road development index in the country.
- The length of National Highways in Arunachal is second lowest among all North Eastern States.
- The rate of growth of National Highway and other roads is very low, as compared with that of some other States in the North-East.
- The State faces severe problems in road development: hilly terrains susceptible to erosion, seismologically active zone, dense forest cover, heavy rainfall etc.
- The rate of increase of vehicles being much higher than the road development, there has been a sharp rise in the fatal vehicular accidents in the State
- In order to ensure road safety, the State has set up State Road Safety Council and District Road Safety Councils.
- The service extended by the State Transport Department being not adequate, the private sector has assumed increasing importance in recent years. Apart from bus services, the private operators run vans, tata sumos, auto rickshaws, etc.

#### **Policy Options**

- In case of high cost of road construction especially in the steep hills, ropeways may be a viable alternative. In the reverine plains waterways may be the cheapest mode of transport.
- Air connectivity demands priority in view of the high tourism potentiality in the State. Apart from this the remote rural areas where road connectivity is problem air connectivity may be explored as an alternative.
- Though postal services have improved in the State in recent years, its rural coverage remains as low as before. Still telegraphic facilities are not provided by the post offices.
- Postal services should be strengthened in the rural areas where in the absence of banks the post offices can encourage the savings of the rural people with little means.
- Postal services can be improved, only by augmenting transport and telecommunication services.

#### **Tourism**

- There is enough scope for religious, ethnic and adventures tourism in the State.
- In accordance with the interest of the tourists (religious, ethnic, ecotourism etc.) lodging and other tourist facilities should be developed.
- The bottlenecks to attract tourists to these centres are basically due to (a) poor infrastructural availability, (b) Institutional constraints, (c) Limited information.
- Inner-line permit is the main institutional bottleneck to attract tourists and therefore steps may be taken to simplify the procedure to obtain inner line permit at the entry points.
- Inadequate transport and lodging facilities are the main drawbacks to attract more tourists to the State.

### **Policy options**

- Luxury resorts in harmony with natural environment and the preferences of different groups of tourists may be developed by offering surrogate country home. This is possible through public-private partnership basis.
- Tourist's packages scheme may be made available in collaboration with major airlines and travel agents.
- Scope of adventure tourism like river rafting, angling, etc. may be developed.

### **Urban Development**

- The level of urbanisation in the state increased from 3.70% in 1971 to 20.41 % in 2001. The growth rate of urban population during 1991-2001 is around 100%.
- The productive bases of the urban centres are weak and they are not dynamically linked to the local economy.
- Provision of basic urban services is low. The doubling urban population during the last decade has put a serious pressure on the basic urban services.
- The existing towns in the State are not properly planned and they grew as administrative centres only.
- The state falls under Zone- V of the seismic prone areas with a high risk of earth quake and land slide. The pressure on urban land has led to unscientific method of building designing which has got serious environmental consequences.

### **Policy Issues**

- Streamlining simplification of urban management structure by abolishing multiplicity or authorities dealing with urban planning and execution.
- Proper institutional safeguard must be given to the urban informal workers as they constitute a significant segment of the urban workers.
- Since the current urban administration is not yet well-structured, setting up the urban municipalities is a must.
- It is necessary to constitute District Planning Committee in the State for Rural-Urban integrated development.

#### **Potentials in Industries**

- The State has high potentials in indigenous industrial activities as they are intrinsically linked to the culture of different tribal groups. Therefore, there is a need of identification and promotion of these activities.
- Promotion of agro processing industries.
- This sector suffers from different constraints like lack of raw materials, credit and marketing.
- There is no formal institutional setup to address to their problems.
- In the line or Village and Khadi industries, a State level Indigenous Industries Commissions may be set up to address their problems.

#### **Resource -based industries**

- The important characteristics of the resource-based industries are that backward linkage is low and forward linkage is located outside the State. The share of manufacturing in the State income is very low.
- In the early 1990s and 1980s, whatever industries that were there in the State were mainly of forest-based. Due to Supreme Court's restriction on commercial timbering in 1996 many existing forest-based industries were closed.
- At present most of the industrial activities are concentrated in the district of Papum Pare where the State capital is located. These industries are of small scale type.

### **Policy Options**

- Contract enforcement mechanism must be strengthened.
- Land lease policy must be developed to attract private investment in the long term basis.
- Agro processing and packaging industries should be given priority to accelerate the industrialization in the State.

#### Science and Technology

- Pradesh is lagging in Science and Technology (S & T) which is the vital input for a steady improvement of the quality of life of the people especially of those who are suffering from various deprivations. The priority areas include information technology, biotechnology, telemedicine, education, bamboo technology, medicinal plants, etc. Arunachal Pradesh has established 55 CICs which are engaged in disseminating information on agricultural market, government schemes, job opportunities, etc., but this is not enough; more CICs should be established.
- Information Technology culture should be popularized by education and training so that the people can take advantage of e-banking, e-education, etc. In order to make it patent compatible, traditional knowledge especially on medicinal plants should be digitalized in the State by establishing a 'Traditional Knowledge Digital Library' which is already operating in other parts of the country. Apart from this, SPO or call centres and a centre for bioinformatics should be established in order to generate employment.

## **Bio-diversity**

• The sustainable use of rich bio-resources in the State requires properlyplanned biotechnological interventions especially in the forms of collection and selection of elite germplasm, application of plant tissue culture for mass propagation of quality planting materials. Biotechnology should be applied to develop high-yielding varieties of crops and bio-fertilizers, and it can be used to control pests and diseases biologically. Biotechnology should also be applied to the improvement of indigenous fruits, vegetables and plantation crops.

## Social and physical infrastructure

- In 1997, 38.53 percent of the villages in the State were connected by roads.
- In 2001, 44.53 percent of the rural households were electrified.
- In 2001, 63.34 percent of the rural households had access to tap as the source of drinking water. In the same year 73.93 percent of the rural households had no drainage facilities.
- Only 68.09 percent of the children in the State had access to immunization in 2001-02.
- Deposit-GSDP, Credit-GSDP in the State are 49.7 and 19.6 percent respectively, which are very low.
- An overwhelming majority of the people in the remote areas depends on jhum cultivation and supplements their income through hunting and gathering activities. There is high potential of terrace cultivation as 29.49 percent of the land comes under the low slope category (10-20 degree).
- Rural technology is at the extremely low level. In the remote part people even do not have access to kerosene.

#### **Policy options**

- Connectivity needs to be improved.
- Expansion of schooling and health facilities is a sine qua non for promotion of inclusive growth.
- Mobile health services in the remote areas through public private initiatives maybe explored.
- In order to diversify the livelihood options of the people, marketing network needs to be expanded.
- Agricultural extension services need to be revamped to popularize slope specific new crops.
- In order to expand the credit facilities Self Help Group needs to be popularized and state specific collateral in the form of community/clan as the guarantor of loan may be explored.
- Traditional technical know-how is in the verge of extinction and technology mission should upgrade the exiting indigenous technology in a way that becomes economically viable.
- Small scale food processing industries along with cold storage facilities should be developed particularly in the remote areas. This requires electricity. In order to make electricity available in the remote areas the

- construction of mini-hydal projects should be encouraged.
- Technology being the source of all dynamism and progress, all-out efforts should be made to improve rural technological configuration of production, distribution, etc.
- It is essential that all cultivable land should be cadastrally surveyed and records of their ownership duly prepared, so that land can be used as collateral for loans from financial institutions.
- Expansion of the market including financial market in rural areas requires strengthening of the contract-enforcing mechanism.

#### **Border Trade**

- The State has borders with three countries mainly Bhutan, China and Myanmar with a total international boundary of 1680 km.
- From time immemorial informal trade has been taking place through different passes.
- The products that are identified where the State has the export potential are coffee, floriculture products, fresh fruits and vegetables, spices, tea and handicraft products.
- Different fruits like apple, orange, pineapple, banana, and kiwi are produced in the State.
- The State has identified more than 500 herbal medicinal plants and other aromatic plants like citronella, lemon-grass, vanilla, patchouli, agar, etc. having high international demand.
- Identified 50000 MW hydroelectric potential can be a boon for the State. Considering the differential in peak time demand of India and South East Asia there lies huge potential in power export to these regions.
- The State can also play a major role in reducing the transport cost for the goods exported from other parts of India to China through sea route. This is possible only after development of proper internal transport communication network in (a) Tezpur-Bomdila-Bumla, (b) Lakhimpur-Daporijo-Nacho c) Jonai-Sadiya-Mekha-Malvinil-Tajobum, and (d) Sadiya-Tezu-Chirangal-Kahoo sectors.
- Rangiya -Jonai train route should be upgraded to broad gauge so that goods produced from mainland India can be exported to China through these trade routes.

## **Fiscal Issues and Fiscal Management**

• Over the time, non-developmental expenditure like interest payment and pension has increased on an average from 41.37 per cent to 50.32 per cent of GSDP, during 1995-2000 to 2000-04. There is also a declining trend in developmental capital expenditure particularly in the areas of agriculture, industry and minerals, rural development, transport and general economic services. Thus capital formation is declining in the State. The process has resulted in falling revenue surplus and decreasing developmental capital expenditure in the budget of the Government. Thus the State is on a path of creating more jobs by withdrawing itself from productive capital investment. In a situation of low level of private investment in the State, there is shrinkage in productive capacity of the economy.

• Developmental capital expenditure has gone down and non developmental revenue expenditure has gone up in the State. Government expenditure is around 70 percent of the GSDP and contribution of service sector is more than 100 percent to the growth of GSDP. There is also a distortion, in the sense that non-infrastructure categories service sector contributes around 70 percent and infrastructure categories around 30 percent to the growth of service sector. This is the reason why a proper balance is required in expenditure priorities of the State.

### **Policy options**

- Capital expenditure in the sectors like agriculture, industry and minerals, transport and general economic service needs to be increased.
- Rising interest payment and pension are the main reasons of the increase in non-developmental expenditure. Therefore low interest loan options may be explored and alternatives like institutional based pension reform may be introduced.
- Identification and redeployment of excess employees is a must.
- All the steps must be taken to use borrowed fund for developmental capital expenditure.
- In order to increase the revenue receipts, steps may be taken to revise land tax rate, revamping of land revenue administration, revising of motor vehicle tax, imposition of professional and urban property tax.
- Finally, in the long run, with the increase in power production of the State the power royalty would be sutlicient to meet the budgetary need of the State.

## **Strategy for Development**

- The new strategy must take into consideration the fact of high transaction cost which keeps the productivity of industrial capital low in the State.
- The new strategy should aim at enhancing the reduction of transaction costs which would enlarge the productivity of the economy.
- Strengthening the contract-enforcing mechanism, addressing the problems of inequality and unemployment are the ways of reducing the transaction costs.
- Speeding up the development of the hydro-electric project, expansion of horticulture and plantation and establishment of agro-industries in the backward districts should be the priorities.
- 1.32 At the backdrop of above, the State Govt. will strive to implement the recommendations of the reports to accelerate the process of development. At the same time required attention of Govt. of India is imperative to make rational development decisions as the State would require heavy investment in the economic and social sectors during the Annual Plan 2008-09 to break the vicious circle of low economic growth. In this context, recent effort of the Govt. of India is laudable and appreciable.

## Hon'ble Prime Minister's New Initiatives for development of Arunachal Pradesh:

- 1.33 During the maiden visit to Arunachal Pradesh on 31<sup>st</sup> January- 1<sup>st</sup> February, 2008, Dr. Monmohan Singh, Hon'ble Prime Minister announced a special economic package for rapid development of the State. The economic package includes the followings:
  - Construction of new Secretariat Building,
  - Pare and Dibang power projects,
  - Itanagar water supply scheme,
  - Programme for electrification of all households in Arunachal Pradesh (Covering all villages in border areas) costing Rs. 550.00 crore.
  - New rail link between Itanagar and Harmuti.
  - A new Greenfield airport at Itanagar, operationalisation of other airports at Pasighat, Aalo, Daporijo, Ziro, Tezu and upgradation of infrastructure at Tuting, Mechuka, Pasighat, Vijainagar and Walong.
  - Daily helicopter services between Guwahati and Tawang.
  - 2-lane Trans-Arunachal Pradesh Highway from Tawang to Mahadevpur covering 1840 km and costing Rs. 5500.00 crore.
  - Naharlagun Nirjuli drinking water supply project.
  - Road connectivity to Itanagar with a 4 lane Highway.
  - Road connectivity to 513 habitations under PMGSY.
  - Reconstruction of areas damaged by floods costing Rs. 400.00 crore.
  - Completion of incomplete projects costing Rs. 265.00 crore.
- 1.34. The Govt. of Arunachal Pradesh applauds the Planning Commission for bring out two excellence reports, viz., (a) The Report of the Task Force on Connectivity and Promotion and Trade and Investment in North-East, and (b) Task Force on Border Area Development Programme (July, 2007). These two reports have recommended huge investment for reducing infrastructural gap. A time bound and resource based action plan for the implementation of recommendations is required to be launched.

### 1.35 A brief **statistical profile of Arunachal Pradesh** is given below:

Demographic profile	
Geographical Area (Sq. km)	83,743
Population ( 2001 Census)	10,96,702
(a) Male -5, 79,158 (52.81%)	
(b) Female – 5, 17,544 (47. 19%)	
Population growth rate (1991-2001)	26.85%
Density of population ( per sq. km)	13
Sex Ratio (2001 Census)	894
Life Expectancy at Birth (2000)	54.05 yrs
Rural Population (2001 Census)	79.66%
Urban Population (2001 Census)	20.34%
Percentage of people living Below Poverty Line	33.47%
Percentage of Literacy (2001 Census)	54.34%
Male	64.07%
Female	44.24%

Category of workers	
Cultivators	58.44%
Agriculture Labourers	3.85%
Workers in household industry.	0.86%
Other workers	36.85%
Net State Domestic Product at current prices (Rs in lakh)	2,76,652.00
2005-06 (Quick estimate)	2,70,032.00
Net State Domestic Product <b>a</b> t constant prices (Rs. in lakh)	2,33,030.00
2005-06 (Quick estimate)	2,33,030.00
Contribution to total GSDP, 2005-06 at current prices(	
in percentage)	
a)Primary sector	28.11%
b)Secondary Sector	31.90%
' · · · · · · · · · · · · · · · · · ·	39.99%
c)Tertiary Sector	39.99%
Contribution to total GSDP, 2005-06 at constant prices(in percentage)	
a)Primary sector	24.77%
b)Secondary Sector	32.86%
' · · · · · · · · · · · · · · · · · ·	
c)Tertiary Sector	42.37%
Average rainfall (in mm) 2006-07 Forest Cover	2,864.80
	51.540
Forest Cover(Sq Km)	51,540
National Park	2
Wild Life sanctuaries	10
Area planted (hect.)	19,519
Area covered under Apna Van (hect.)	1,185
Agriculture	2.00
Net area (in lakh hectors)	2.09
Gross crop area( in lakh hect)	2.71
Cropping intensity (%)	129.67%
Food grains production (MT)	3,16,504
Area under rice cultivation (hect.)	1,23,038
Area under coarse grains cultivation (hect.)	67,809
Area under wheat (hect.)	3,979
Area under pulses (hect.)	7,842
Area under oil seeds (hect.)	32,160
Irrigation potential created (hect.)	1,14,659
Net area irrigated (hect.)	52,000
Area under permanent cultivation (hect.)	98,500
Area under HYV (hect.)	27,000
Horticulture	00.450
Fruits production (MT)	93,468
Area under Apple (hect.)	10,758
Area under Citrus (hect.)	25,000
Area under Pineapple (hect.)	9,250
Live stocks	
Cattle	4,58,173
Mithun	1,84,394
Goats	2,31,272
Pigs	3,29,880

Poultry	12,90,408
1 outly	12,50,100
AH & Vety. infrastructure	1
Veterinary Hospital	93
Veterinary Dispensary	155
Veterinary Aid Centre	14
Veterinary Mobile Unit	1
Vaccine Depot	3
Disease Investigation Laboratory	11
District Diagnostic Laboratory	2
Vigilance Unit	11
Cattle Breading Farm	16
Poultry Farm	
Fisheries	
Government Fish Farm (hect.)	55
Beels and Lakes (hect.)	40
Private Fish Ponds (hect.)	6,105
Area under Paddy-cum-Pisciculture (hect.)	1,171
Total area under pisciculture (hect.)	2,400
Fish Production (in tonnes)	2,730
Fish Seed Production (Fry in millions)	30
Educational Institutions	30
Higher Secondary Schools	91
Secondary Schools	149
Middle Schools	588
Primary Schools	1,438
Pre-Primary Schools	15
Colleges	10
University	1
Professional Educational Institution	1
Polytechnic/ITI/RIDC	7
Enrolment in Elementary Education  Taggher, Punil Patio (Primary School)	2,67,111 1: 53
Teacher- Pupil Ratio (Primary School)	
Enrolment of Girl Students(I- XII)  Health	1,55,424
	22.2
Birth Rate (Per 1000 persons)	23.3 5.0
Death Rate (Per 1000 persons) IMR	37
	3
General Hospitals	
District Hospitals	14
C.H.C.	43
P.H.C.	108
Sub-Centres Assumed in Diagrams	557
Ayurvedic Dispensary	3
Hoemeopathy Dispensary	37
T.B. Centre	13
No. of Doctors	531
Doctor population ratio	1: 2067
Number of Hospital Beds	2218

Transport and Communications	
Total Road Length (kms)	18,086.52
Road Density (per 100 sq. kms)	21.60
Length of National Highway (kms)	419.52
No. of Administrative Centres yet to be connected by road	34
<u> </u>	
No. of Villages yet to be connected by road	2453
No. of Villages connected by roads	1,407
Total Rail road length (MG) (kms)	
No. of helipads	85
No. of ALGs	15
No. of Post Office (including E.D.B.P.O.)	304
Population served per Post Office	25,295
Power	22
Installed capacity Hydel (MW)	33
Installed capacity diesel (MW)	27.12
Village Electrified	2195
Percentage of village electrified	56.65%
Per capita consumption of Electricity (KWH)	78.18
Water Supply	
No. of villages fully covered	1359
Industries & Minerals	
Medium scale industry	15
No. of SSI Units functioning	504
Industrial Estates	1
DIC	16
No. of Craft Centre	27
Industrial Growth Centre	1
Mineral Resources (in million tones)	
a) Coal	84.23
b) Limestone	379.05
c) Dolomite	154.13
d) Graphite	3.26
Banking	
State Bank of India	42
United Bank of India	3
United Commercial Bank	2
Vijaya Bank	2
Central Bank	1
Arunachal Pradesh Rural Banks	18
Co-operative Apex Banks	30
Credit Deposit Ratio	
(a) Scheduled banks	17.25%
(b) All banks	23%
FPS/ CD Blocks	
No. of Co-operative Societies	450
LAMPS	33
Fair Price Shops	
(a) Private	1318
(b) Co-operative	229
(c) No. of CD Blocks	87
(7) 1.0. 01 02 2100110	, J,

Information and Broadcasting	
Doordarshan Kendras	Itanagar
VLPT	Tezu and
	Pasighat
IR Stations	Itanagar,
	Tezu,
	Pasighat,
	Tawang and
	Ziro
CICs	56 Blocks

## **CHAPTER - II**

# OBJECTIVES AND PRIORITIES OF ANNUAL PLAN 2008-2009

2.1 In the light of present development trends, constraint of growth and emerging challenges ahead outlined in Chapter-I, the objectives and priorities of the State during Annual Plan 2008-09 will be on

## **Objectives**

- Stress on productive sectors of agriculture, horticulture and food processing with emphasis on marketing for attainment of self-sufficiency in food by adoption of modern practices.
- To ensure optimal utilization of land resources for cultivation, emphasis will be on assured irrigation system suiting the geographical requirement in different parts of the State.
- Protection and conservation of bio-diversity along with stress on afforestation programmes.
- Thrust on creation and maintenance of economic and social infrastructure.
- Exploration and exploitation of hydropower potential and mineral wealth like coal, oil and natural gas etc.
- Employment generation for the people living below poverty line and unemployed educated youths.
- Improvement of educational, health and nutritional profile of the population.
- Development of agro and forest based industries.
- Infrastructure development in tourism sector including adventure and ecotourism etc.
- Strengthening of institutional infrastructure for Panchayati Raj Institutions and Municipal administration.

### **Priorities**

- Creation and maintenance of physical and social infrastructure.
- Provision of basic minimum services like education, nutrition and health to improve the quality of life.
- Investment in agriculture & allied activities with emphasis on marketing to improve the livelihood of rural masses.
- Harnessing of potential of hydro power, mineral wealth and tourism.
- Generation of employment for people below poverty line and unemployed educated youths.
- Operationalisation of District Planning Committee.

## 2.2 Proposed plan outlay for Annual Plan 2008-09 and its rationale:

The projected outlay for Annual Plan 2008-09 is Rs. 1980.00 crore. Requirement of such massive investment is absolutely necessary taking into consideration the following factors:

- The problem of issues of basic infrastructure like roads & communication and power need to be addressed in a time bound manner.
- Delivery of basic social services like primary health care and education are cost prohibitive in Arunachal Pradesh because of remoteness and inaccessibility. Therefore, more resources are required to deliver services per habitation compared to a State in the plains.
- Basic amenities like water supply, sanitation, drainage and sewerage etc. are inadequate.
- Remote and inaccessible areas of the State are suffering from the syndrome of isolation and alienation. In the absence of road connectivity to these areas, the cost of delivery of goods and services are extremely high.
- About 33.47% of the total population of the State is living below poverty line as against national ratio of 26.10 % in 1999-2000.
- In comparison to plain areas of other States, unit cost of construction and implementation of various schemes and projects are disproportionately high in the State as all construction materials are to be transported from the outside the State.
- Low agriculture yields and traditional farming are mainly subsistence which is compounded with increase of population, shrinking jhum cycle and decreasing productivity of limited arable land.
- Lack of marketing infrastructure and access to market of surplus agricultural and horticultural produces have deprived the farmers from remunerative prices.
- Employment in Arunachal Pradesh is solely dependent in Government organizations and the Government related activities.
- Agriculture, which provides subsistence to about two third of the population of the State, is characterized by primitive method of cultivation and wide prevalence of Jhum cultivation.
- The State Govt. needs to reach out to a large number of remote and inaccessible border areas to deliver administrative and developmental services. The administrative arrangements need to be modernized.
- Capital formation capabilities and resource mobilization for financing the Annual plans are major issues being confronted by the State.
- Quantum jump has been asked for allocation under ACA/SPA. Past experience shows that the allocation under ACA/SPA helps in taking major projects of socio-economic infrastructure. A massive dose of funding is required to decrease the infrastructure gap in the form of connectivity, electrification and creation of many social assets such as schools, hospitals etc.

The above factors amply justify need of high dose of investment in Arunachal Pradesh during Annual Plan 2008-09.

#### The summary of the proposed Scheme of Financing of Annual Plan 2008-09 is 2.3 indicated below.

(Rs. in crore)

State's Own Resources	9.24
State's Govt. Budgetary Borrowings (Rs. 229.95 crore (borrowings)- Rs. 93.95 crore (Repayment of loans) and is inclusive of loan components of ACA/SPA, Negotiated loans, EAP etc.	136.00
Normal Central Assistance	761.18
ACA for EAP	9.00
Others (including Activity Specific allocation earmarked by the Planning Commission and One time ACA/SPA)	1064.58
Total	1980.00

## 2.4

**Sector/ Heads of Development-wise break up of proposed outlay:** The Sector/Heads of development-wise proposed outlays for the 11<sup>th</sup> Five Year Plan (2007-12) and Annual Plan 2008-09 are as under:

(Rs in lakh)

	Proposed	d Outlay
M' H 1/M' H 1 CD 1	Eleventh	Annual
Major Heads/Minor Heads of Development	Plan	Plan
	(2007-12)	2008-09
1	2	3
I. Agriculture & Allied Activities		
Crop Husbandry( Agriculture)	17000.00	2193.00
Crop Husbandry( Agriculture)	(1.93)	(1.11)
Horticulture	10200.00	972.00
Horticulture	(1.16)	(0.49)
Soil and Water Conservation	11210.00	1143.00
Bon and Water Conservation	(1.28)	(0.58)
Animal Husbandry	9380.00	1200.00
Annia Husbandry	(1.07)	(0.61)
Diamy Davidson mant	396.00	70.00
Diary Development	(0.05)	(0.04)
Fisheries	3086.00	360.00
Tisheries	(0.35)	(0.18)
Forestry & Wildlife	27970.00	3946.00
Torestry & Whathe	(3.19)	(2.00)
Agriculture Research & Education	925.00	126.00
Agriculture Research & Education	(0.11)	(0.06)
Co-operation	3000.00	375.00
	(0.34)	(0.19)

Other Agricultural Programmes:		
	500.00	81.00
(a) Agriculture marketing	(0.06)	0.04)
T-4-1 (T)	83667.00	10466.00
Total- (I)	(9.52)	(5.29)
II. Rural Development		
1. Special Programme for Rural Development:	6938.00	1372.00
1. Special Frogramme for Kurar Development.	(0.79)	(0.69)
(a) Integrated Wasteland Development Projects	1088.00	200.00
Scheme	(0.12)	(0.10)
(b ) Swaranjayanti Gram Swarozgar Yojana	842.00	300.00
(b) Swaranjayanti Gram Swarozgar Tojana	(0.10)	(0.15)
(c) DRDA Administration	1600.00	200.00
(C) DRDA Administration	(0.18)	(0.10)
(d) Others ( to be specified)	3000.00	612.00
i ) Block level Administration	(0.34)	(0.31)
10.14	258.00	30.00
ii) Monitoring Cell	(0.03)	(0.02)
	150.00	30.00
iii) S.I.R.D	(0.02)	(0.02)
	8758.00	622.00
2.Rural Employment	(1.00)	(0.31)
	7108.00	222.00
(a) Sampoorna Gram Rozgar Yojana (SGRY)	(0.81)	(0.11))
(h) National Employment Consents Durgman	1650.00	400.00
(b) National Employment Guarantee Programme	(0.19)	(0.20)
0.7	2883.00	175.00
3.Land Management	(0.33)	(0.09)
4.Other Rural Development Programmes	10150.00	595.00
	2500.00	105.00
(a) Panchayati Raj	(0.28)	(0.05)
(1) O(1) P	7650.00	490.00
(b) Other Programmes of Rural Development	(0.87)	(0.25)
T. 4.1. II	28729.00	2764.00
Total – II	(3.27)	(1.40)
III. Special Areas Programmes		
Other Special Areas Programmes		
	24505.00	4733.00
(i ) Border Area Development Programme	(2.79)	(2.39)
(ii) Dealground Designs Creat Event	9000.00	1545.00
(ii) Backward Regions Grant Fund	(1.02)	(0.78)
(iii) Funds under Article 275 (1)	1100.00	220.00
	(0.13)	(0.11)

(iv) Department of Times & Changlang Affairs	12500.00	2500.00
(iv) Department of Tirap & Changlang Affairs	(1.42)	(1.28)
Total- III	47105.00	8998.00
10tai- 111	(5.36)	(4.54)
IV. Irrigation & Flood Control		
Major and Medium Irrigation	7055.00	72.00
Major and Medium Imgation	(0.80)	(0.04)
Minor Irrigation	42000.00	7650.00
Willor Irrigation	(4.78)	(3.86)
Command Area Development	2800.00	360.00
Command Area Development	(0.32)	(0.18)
Flood Control	5660.00	675.00
Tiood Control	(0.64)	(0.34)
Total – IV	57515.00	8757.00
	(6.54)	(4.42)
V. Power		0.400.00
Power (T&D)	101800.00	9408.00
	(11.58)	(4.75)
Hydropower	37000.00	6725.00
	(4.21)	(3.40)
Integrated Rural Energy Programme	1450.00	153.00
	(0.16)	(0.08)
Non Conventional Source of Energy	2182.00	(0.14)
	(0.25) 142432.00	16565.00
Total-V	(16.20)	(8.37)
VI. Industries & Minerals	(10.20)	(0,01)
VI. Industries & Minerals	5700.00	460.00
1. Village & Small Industries	(0.65)	(0.23)
	4300.00	18.00
2. Other than VSI	(0.49)	(0.01)
3. Industrial Training Institute ( ITI)	1190.00	150.00
-	(0.11)	(0.08)
4 Tantila Handlages 0 Handlage C	6500.00	485.00
4.Textile ,Handloom & Handicraft	(0.74)	(0.25)
5 Trada & Commerce	250.00	15.00
5. Trade & Commerce	(0.03)	(0.01)
6. Geology & Mining	5000.00	250.00
o. Geology & Willing	(0.57)	(0.13)
Total –VI	22940.00	1378.00
	(2.61)	(0.70)
VII. Transport		
Civil Aviation	2500.00	300.00
	(0.28)	(0.15)

Doods & Duidees	168796.00	17547.00
Roads & Bridges	(19.20)	(8.87)
a) DWD	132300.00	16147.00
a) PWD	(15.05)	(8.16)
1) DWD	36496.00	1400.00
b) RWD	(4.15)	(0.71)
Dood Transport	5000.00	810.00
Road Transport	(0.57)	(0.41)
Others (to be specified)	550.00	77.00
Others ( to be specified)	(0.06)	(0.04)
(a) Directorate of Transport	450.00	63.00
(b) Road Safety	100.00	14.00
•	176846.00	18734.00
Total VII	(20.12)	(9.46)
IX. Science ,Technology & Environment	( ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	
,	4800.00	1050.00
Scientific Research	(0.55)	(0.53)
Ecology & Environment	200.00	19.00
Leology & Environment	(0.02)	(0.01)
Total –IX	5000.00	1069.00
10001 111	(0.57)	(0.54)
X. General Economic Services		
Secretariat Economic Services	2300.00	435.00
Secretariat Leonomic Services	(0.26)	(0.22)
Planning		89054.00
Timming		(44.98)
Tourism	10640.00	630.00
	(1.21)	((0.32)
Economic & Statistics	2000.00	198.00
	(0.23)	(0.10)
Food & Civil Supplies	2506.00	217.00
	(0.29)	(0.11)
Other General Economic Services		
Legal Metrology and Consumer Affiairs	678.00	75.00
Zegai Monorogy and Consumer Fillians	(0.08)	(0.04)
District Level Planning	16000.00	1600.00
District Devel Liming	(1.82)	(0.81)
MLALADS	15000.00	3000.00
	(1.71)	(1.52)
Small Savings	150.00	19.00
Sman Savings	(0.02)	(0.01)
Total – X	49274.00	95228.00
	(5.61)	(48.09)

XI. Social Services	116112.00	16054.00
General Education	(13.21)	(8.11)
Cabaal Education	95750.00	14504.00
School Education	(10.89)	(7.33)
(a) Elementary Education	65909.00	9823.00
(a) Elementary Education	(7.50)	(4.96)
(b) Secondary Education	25358.00	3924.00
(b) Secondary Education	(2.88)	(1.98)
(c) Adult Education	1760.00	267.00
(0)110010 20000001	(0.20)	(0.13)
(d) others (NCC, Sports etc)	2723.00	490.00
(a) states (1000, sports etc)	(0.31)	(0.25)
Higher & Technical Education	20362.00	1550.00
Tilgilot & Teelilileat Eddedilott	(2.32)	(0.78)
Sports & Youth Affairs	3864.00	414.00
Sports & Touth Arrairs	(0.44)	(0.21)
Art & Culture	2930.00	180.00
	(0.33)	(0.09)
Research	1873.00	275.00
Research	(0.21)	(0.14)
Public Libraries	1120.00	127.00
Tueste Bieruites	(0.13)	(0.06)
Medical & Public Health	32000.00	2500.00
Tredical & Lucile Health	(3.64)	(1.26)
Water Supply & sanitation	31000.00	4900.00
water supply to summation	(3.53)	(2.47)
Housing	21068.00	3286.00
	(2.40)	(1.66)
(a) General Housing	15000.00	2394.00
	(1.71)	(1.21)
(b) Police Housing	3720.00	591.00
, ,	(0.42)	(0.30)
(c) Indira Awas Yojana (IAY)	2348.00	301.00
Luban Davalanmant	(0.27) <b>25700.00</b>	(0.15) <b>1852.00</b>
Urban Development	(2.92)	(0.94)
a) Urban Development	25000.00	1732.00
b) Town Planning	700.00	120.00
o) rown rianning	1323.00	218.00
Information & Publicity	(0.15)	(0.11)
	807.00	135.00
Labour & Employment	(0.09)	(0.07)
i) Labour & Labour Welfare	532.00	90.00
ii) Employment Services	275.00	45.00

Social Wolfers Woman & Child Dayslanmant	5000.00	1140.00
Social Welfare, Women & Child Development	(0.57)	(0.58)
	5000.00	450.00
Nutrition	(0.57)	(0.23)
	247797.00	31531.00
Total XI	(28.19)	(15.92)
XII. General Services		
Station and & Drinting	2000.00	153.00
Stationery & Printing	(0.23)	(0.08)
Dalila Wada	14350.00	2007.00
Public Works	(1.63)	(1.01)
	1400.00	350.00
Other Administrative Services	(0.16)	(0.18)
(a) Administrative Training Institute	250.00	50.00
(b) Infrastructure for Judiciary	400.00	50.00
(c) TFC Grant	750.00	250.00
T-4-1 VII	17750.00	2510.00
Total – XII	(2.02)	(1.27)
C I T. 4.1	879055.00	198000.00
Grand Total	(100.00)	(100.00)

Note: - Figures in parenthesis indicate % to the total projected outlay

Highest priority has been proposed to Social and Services Sectors with 15.92 % followed by Roads & Bridges sector (9.46%) and Power sector (8.37%) during Annual Plan 2008-09. Within the social and services sector highest priority has been proposed to education sector (8.11%).

## **Projected outlay for Eleventh Five Year Plan (2007-2012)**

2.5 The State Govt. had earlier submitted a projected outlay of Rs.8790.55 crore for 11<sup>th</sup> Five Year Plan. However, the Report of the Working Group on States' Resources for the Eleventh Five Year Plan has recommended aggregate resources of Rs. 8105.00 crore (at current prices) for Arunachal Pradesh. On the other hand, the Planning Commission vide D.O. No. M-12011/1/2007-SP-Coord dated 6<sup>th</sup> November, 2007 has indicated a plan outlay of Rs. 7901.00 crore which will not be in consonance with the State's barest requirement during 11<sup>th</sup> plan period. Considering the State Government's commitments, inescapable committed liabilities and inflationary effect, the projected outlay of Rs. 8790.55 crore is rational and justifiable to achieve the "inclusive growth"- the cherished developmental vision of the 11<sup>th</sup> Five Year Plan.

## **CHAPTER-III**

## SECTORAL PLAN PROPOSALS

## AGRICULTURE & ALLIED ACTIVITIES

# **Agriculture**

3.1 Arunachal Pradesh accounts for a high proportion of tribal population who live in relative isolation, sustaining on Shifting cultivation and terraced cultivation. 80% of population living in rural area is dependent on agriculture. About 62.29% of total working population is engaged in agriculture. Agriculture in the State is vulnerable to vagaries of the monsoon and is influenced by the annual variability in the rainfall pattern. Agriculture is the mainstay of the people of the State and about 79.66% of the State's population is dependent on agriculture and 58.44% of the total workers are cultivators as per 2001 census. The State has around 2.09 lakh hect of net cultivable area and 2.71 lakh hect of gross cultivable area. The net irrigation area under utilization is around 52,000 hect with cropping intensity of 129.67%. So far the State has not been able to achieve the desired growth rate to attain self-sufficiency in food grain production though there has been remarkable achievement on overall context in the field of agriculture to boost up the rural economy and income of the farmers. The per hect yield of most crops in the State is much below the National average. The estimated population in the State during 2008-09 would be around 13, 41,919 lakh with requirement of rice alone nearly 2, 31,883 lakh MT. Presently the State is deficit by around 96,098 MT of rice.

## 3.2. Objectives for Annual Plan 2008-09:

- Reduction of regional imbalances and ensure food security.
- Enhancement of income of the farmers through commercialization and diversification.
- Creation of employment opportunities by generating surplus production, providing better marketing infrastructure & processing facilities and bringing more rainfed area under Watershed approach.
- Need based trails to make the farming system more effective & demand driven based on agro-climatic situation.
- Bringing more area under assured irrigation by creating additional irrigation facilities.

### 3.3. Strategies:

- Enhancement of income of the farmers by making the programmes more dynamic, stable and sustainable based on actual need and agro climatic requirement.
- Technology transfer by modernization of Agricultural Extension System and Research & Development activity.
- Strengthening of marketing network to ensure efficient marketing system and creation of post harvest facilities.

#### 3.4.1. Major Programmes for Annual Plan 2008-09.

In view of objectives, approaches and thrust area for bringing diversification to get higher growth rate and raising income of the farmers, the plan programmes envisaged for the year 2008-09 are as under:-

#### 3.4.2. Crop Husbandry:

This major Head of Development will cover basically the development of food crops and cash crops along with other supporting services like

- Integrated Nutrient Management (INM)
- Integrated Pest Management (IPM)
- Seed Production.
- Farm Mechanization
- Modernization of Agril. Extension.
- Development and up keeping of infrastructure facility for efficient and responsive administration.
- Other related programmes.

#### 3.4.3. **Food Crop Development:**

Following are the main sub-programmes proposed to increase availability of food grains in the State:

- Development of rice.
- Coarse Cereal crop cultivation.
- Enhancing wheat production in selected & potential areas.
- Pulses development.
- Contingency crop production programme in the event of crop losses due to natural calamities.
- Intensification of cropping system approach.

#### 3.4.4 **Cash Crop Development:**

The higher production and productivity of all popular cash crops like potato; ginger, oilseeds, season vegetables and spices crops will be prime strategy in the year 2008-09. The per unit productivity of these crops are comparatively lower and needs special attention. Efforts will continue to popularize and extend cultivation of ramie, cotton, garlic, and onion & sugarcane so as to meet out internal demand as well as for trade purposes.

#### 3.4.5. Supporting Services/ Programmes:

The supporting programmes for augmentation of production are

- Integrated Nutrient Management.
- Integrated Pest Management.

#### 3.4.6. Seed Production Programme.

Use of quality seeds in the crop production programme is pre-requisite to ensure higher production through increased productivity. This is a supplementary activity which needs to be augmented simultaneously. The resources available within the State are quite inadequate to meet up the seed requirement of different crops. Therefore, the programme requires to be continued with better care and management, both in the Govt. farms as well as on farmers' field.

#### 3.4.7. Agriculture Extension & Training.

The need for proper manpower development is an area of prime consideration. Extension provides the necessary impetus to the production process through motivation. Any type of cultivation process requires backing of extension activities. Therefore, it is imperative to provide extension coverage to the farmers based on agro climatic need. Improvement of farmers' skill through training are equally important for which efforts have to be continued to train and acquaint the farmers with better technologies & inputs.

#### 3.4.8. Farm Implements & Machinery (Farm Mechanization).

Realizing the poor economic background of sizable number of farmers, it is proposed to put major thrust in farm mechanization incorporating suitable components which will cover entire farming community irrespective of their financial capability in the following way:

- Improved farm implements.
- Suitable hand tools for border areas.
- Subsidy for tractor & machineries.
- Processing machineries.

#### 3.4.9. Development of Infrastructure facilities and responsive administration

Infrastructural facilities within the State are too inadequate to cope up the need of the farming sector as well as to ensure responsive administration at all levels. The main components under this sub-head of development are:-

- Construction of permanent buildings for field level functionaries in the communicated areas including Bio-control laboratory & soil testing lab.
- Construction of temporary structure in border and inaccessible areas.
- Construction of laboratories for quality control (Bio-control laboratory, soil& seed testing lab).
- Maintenance of liabilities (Manpower and assets created since 1984 onward).
- Payment of revenue against Govt. land.
- Establishment of Evaluation & Monitoring Cell at State level.
- Information Technology/ Internet connectivity.
- Transport facility.
- Consultancy services for preparation of project.
- Creation of post.
- Renovation of existing buildings.
- Case study on different development issues & impact evaluation.

#### 3.4.10. State share towards Centrally Sponsored Schemes.

The State will have to meet up state share towards implementation of the Centrally Sponsored schemes in the State. Implementation of such schemes in the state have boost up the production of different crops by providing assistance in different areas of agriculture development. The continuing major schemes are:-

- Macro Management (80:20).
- Extension reform (90:10).
- Agril. Census (No. fixed pattern).
- EARAS (50:50).
- Ginger procurement by NERAMAC (90:10).
- WDPSCA (100%).
- Organic farming (100%).

#### 3.4.11. Agriculture Research & Education.

The research activities of the Agriculture department are still confined to data collection from the field trails on various aspects of crop production. The Department, therefore, seeks to provide adequate stress on research by reorganizing the existing structure and pooling the existing manpower to deal effectively aiming at generating research output for the extension functionaries. Efforts are also intended to take up research programme on improving the productivity under Jhumming and for generating data that suggest steps required to minimize the ill effect of Jhumming.

Education is also an integral part of developing the human resources in the field of agriculture. The human resource development is, therefore, one of the major programmes in which local youths are proposed to be sent for higher studies leading to B.Sc. (Agril.) degrees. The expenditure on their stipend, book grants etc are to be borne by the State Government.

Agricultural Information constitutes an important aspect of technology dissemination and is, therefore, one of the thrust areas along with research & education and needs to be continued in a big way to cater to the need of the State. Besides this, some provision is also proposed for introduction of new crop varieties and economic crops with a view to raise the total income of the farmers by higher production and productivity. The main components of this programme are:

- Agriculture Education (stipend / fellowship)
- Trial & Research activities.
- Agril. Information and publicity.
- Infrastructure development (Quality Control laboratories).

#### 3.4.12. Agril. Marketing, Agro Processing & Quality Control

Over the years there has been a significant increase in the production of crops like Potato, Ginger, Mustard, Vegetable, Sugarcane, Chili & Maize in the State. The farmers are now facing the new challenge for disposal of these commodities and are deprived of the remunerative prices. All these commodities are considered as surplus and providing appropriate market avenues to the farmers is the real challenge at present to the State. The State Agril Marketing Board is organizing itself as per provision of the Agril. Marketing Act. But the marketing activities could not be given proper impetus due to inadequate fund

provided to the Board. The main components of the programme proposed during Annual Plan 2008-09 are:

- Grants-in-Aid to Marketing Board.
- Transport subsidy for disposal of surplus produces.
- Market survey and Training.
- Packaging material.
- Strengthening of Market yard and network.
- 3.5. So far, fifty eight (58) nos. watershed projects are under implementations under NWDPRA and 21 nos. new projects have been approved for which assistance from Govt. of India. The Extension Management Programme through Extension Reform is in the process of implementation and 7 districts have been selected to initiate implementation.
- 3.6. In accordance with the resolution adopted in the 53<sup>rd</sup> NDC meeting held on 29<sup>th</sup> May' 2007, the department has initiated preparation of State Agriculture Development Plan for achieving agricultural growth which will include live stocks and fishing to be integrated with minor irrigation projects, rural development works and other schemes for water harvesting conservation. Rashtriya Krishi Vikash Yojona is being introduced to incentives to increase investment in Agriculture and allied sector.
- 3.7. Outlay proposed for Annual Plan'2008-09 is Rs. 2400.00 lakh, the breakup of which is as under:-

(Rs. in lakh)

		(Rs. in lakh)
Sl.		Proposed
No.	Major / Minor Head of Development	Outlay
INO.		2008-09
Α.	Crop Husbandry	
1.	Direction & Administration	1150.00
2.	Food Crop Production	90.00
3.	Agriculture Farm (maint. & seed production through Govt. seed farms)	40.00
4.	Manure & Fertilizer	100.00
5.	Plant Protection	50.00
6.	Commercial Crops	341.00
7.	Extension & Farmers training	12.00
8.	Watershed Development Programme in shifting cultivation areas (WDPSCA)	300.00
9.	Agriculture Census	4.00
10.	EARAS [CSS]	20.00
11.	Farm implements and machineries	40.00
12.	Support to State Extension Programme for extension reforms.	40.00
13.	Ramie cultivation	1.00
14.	Ginger production by NERAMAC	5.00
	Total Crop Husbandry	2193.00
B.	Agri Research & Education	126.00
C.	Agril. Marketing & Quality Control	81.00
	Total (A+B+C)	2400.00

3.8. The item- wise physical targets during 11<sup>th</sup> Five Year Plan, anticipated achievement during 2007-08 and target for Annual Plan 2008-09 are as under:

Item	Unit	Level of Achi. upto	Physical target for	Anti. Ach during	Target 2008-09
		10th Plan	11 <sup>th</sup> Plan (2007-12)	2007-08	
1	2	3	4	5	6
A. Production of Food grain	ıs				
I) Paddy	000`MT	216.953	369.500	254.050	275.000
ii) Wheat	000`MT	6.301	13.000	7.500	9.000
iii) Coarse Grain	000`MT	84.952	116.000	93.500	100.000
B.iv) Production of Pulses	000`MT	8.298	15.000	9.500	11.500
Total Food grain production	000'MT	316.504	513.500	364.550	395.500
C. Production of Oil Seeds	000`MT	29.265	50.000	34.500	40.000
D. Production of Other Con	nmercial C	rops			
I) Potato	000`MT	31.689	50.000	36.500	42.000
ii) Sugarcane	000`MT	16.843	35.000	18.500	22.000
iii) Ginger	000`MT	42.821	60.000	43.000	44.000
iv) Turmeric	000`MT	1.965	4.000	2.100	2.500
v) Chili	000`MT	2.729	5.000	3.000	3.500
vi) Vegetables	000`MT	78.317	110.000	80.000	85.000
E. Production of Seeds					
a) Cereals	000`MT	1.310	3.000	1.450	1.657
b) Pulses	000`MT	0.300	0.600	0.340	0.388
c )Oil Seeds	000`MT	0.390	0.900	0.435	0.497
d) Potato and others	000`MT	4.500	7.500	4.775	5.458
Total Seeds	000`MT	6.500	12.000	7.000	8.000
F. Distribution of Seeds					
a) Cereals.	000' MT	1.310	3.000	1.450	1.657
b) Pulses.	000' MT	0.300	0.600	0.340	0.388
c) Oilseeds.	000' MT	0.390	0.900	0.435	0.497
d) Potato/Ginger/ Turmeric and Others	000' MT	4.500	7.500	4.775	5.458
Total	000' MT	6.500	12.000	7.000	8.000
Area coverage under Manure and Fertilizer.	000' Hect	27.500	60.000	30.000	35.000
Area under H.Y.V					
Rice.	000' Hect	40.000	88.000	41.700	47.000
Wheat.	000' Hect	3.700	6.000	4.000	4.800
Maize.	000' Hect	23.800	35.000	24.900	26.200
Total	000' Hect	67.500	129.000	70.600	78.000

Area Coverage Under Major crops.

Thea coverage chaci iviajo	1 <b>1</b> 10ps.				
i) Rice.	000' Hect	123.038	125.500	123.100	124.500
ii) Wheat.	000' Hect	3.979	6.500	4.650	5.200
iii) Coarse Grain.	000' Hect	67.809	72.800	68.500	71.500
iv) Pulses(as a whole).	000' Hect	7.842	11.100	3.800	10.200
v) Oilseed.	000' Hect	32.160	36.300	33.000	35.000
vi) Potato.	000' Hect	3.985	5.740	4.500	5.090
vii) Ginger.	000' Hect	5.832	7.700	5.800	5.950
viii)Turmeric.	000' Hect	0.532	0.950	0.550	0.650
ix) Chilli	000' Hect	1.903	2.500	1.890	2.180
x) Sugarcane	000' Hect	1.030	1.400	0.900	0.900
xi) Vegetables	000' Hect	19.753	24.400	20.400	20.700
Cropped Areas					
a) Net area	000'Hect	209.000	216.000	211.000	213.000
b) Gross area	000' Hect	271.00	305.000	275.000	285.000
c) cropping intensity	(in %)	129.66%	141.20%	130.33%	133.80%
Productivity					
a) Paddy	Qtl. Per Hect	17.63	29.44	20.63	22.08
b) Coarse grain	-do-	12.50	15.93	13.64	13.98
c) Wheat	-do-	15.80	20.00	16.12	17.30
d) Oil Seeds	-do-	9.09	13.17	10.45	11.42
e) Pulses	-do-	10.58	13.51	10.79	11.27
f) Potato	-do-	79.58	87.10	81.00	82.51

#### Horticulture

- 3.9. Given its diverse agro-climatic potential, the State is suitable for cultivation of tropical and sub-tropical and temperate fruits, vegetables, spices and other crops of economic potential like medicinal and aromatic plants. Development of horticulture is important as this sector can generate employment opportunity and increase rural income. The Government of Arunachal Pradesh, having realized that horticulture is a core sector to promote accelerated and sustained economic growth of the State, has given major thrust to horticulture development during Annual Plan 2008-09.
- 3.10. Under the Horticulture Technology Mission, which was started since 2001, activities like area expansion, processing and post-harvest management and marketing and R&D etc are undertaken. Under the Technology Mission on Horticulture, Central Govt. is operating four Mini Mission programmes, namely, Mini Mission-I under ICAR, Mini Mission-II for production and productivity of Cash Crop and Spices, Mini Mission-III for marketing and post harvesting activities and Mini Mission-IV deals with fruit processing units. The State Govt. has taken up area expansion of fruits, spices, vegetables, and flowers, drip irrigation, green house, post harvest technology, marketing, fruits & vegetables processing units, high density plantation in apple with drafting root stocks, tissue culture laboratory, poly house cultivation etc. A Horticulture-cum-Forestry College at Pasighat, set up in 2001 under aegis of the Central Agricultural University, Imphal, has imparted education for development of skilled technical manpower in accelerating

development of horticulture and its allied fields.

- 3.11. The Planning Commission has earmarked an ACA of Rs. 50.00 lakh for promotion of lavender plantation in commercial scale during 2007-08.
- 3.12. The State is a natural home of many flowers particularly in the higher altitude areas. Considering its potential for production of quality flowers, seeds and bulbs etc and its role in the rural economy, the State Government pays emphasis on development of floriculture.

#### 3.13. Thrust Areas.

- Commercialization by way of diversification of horticultural activities.
- More emphasis on income generation crops like spices and mushroom.
- Expansion of area under horticulture with emphasis on utilisation of abandoned land, especially jhum land.
- Extension/training supports.
- Strengthening of nurseries.
- Increasing productivity and improving quality of produce.
- Development of quality planting materials.
- Combating prevalence of pest and diseases with special emphasis on Scab Control Programme.
- Management of post harvest technology.
- Marketing linkages of horticultural produces.
- Emphasis on low volume high value like Amla, Kiwi fruits etc.
- Stress on compact area plantation of Orchids etc.

#### 3.14. Major Programmes during 2008-09

The Horticulture Department shall continue to implement following on-going schemes & programmes:

#### **State Plan**

- Horticulture and Vegetable Crops.
- Maintenance of Govt. Farms and Nurseries.
- Floriculture and Kitchen Gardening.
- Horticulture Fair and Exhibition.
- Horticulture Training and Education.
- Mushroom Development Programme.
- Fruit Preservation programme and processing.
- Model Floriculture Centre.
- Bio-control Laboratory.
- Horticulture Information.

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#### **Central Sponsored Scheme.**

- Regional Coconut Nursery (50:50).
- Organic Manure (100%).
- Layout Demonstration Plot (100%).
- Area Expansion under Coconut (100%).

3.15. The outlay proposed for Annual Plan 2008-09 is Rs.972.00 lakh, the schematic distribution of which is as under:

(Rs. in lakh)

Sl.	Major Heads/Minor Head of Development	Annual Plan
No.		2008-09
		Proposed Outlay
A.	Crop Husbandry	
1.	Direction and Administration	491.00
2.	Minor Works	40.00
B.	Horticultural crops	
1.	Maintenance of Farms and Nursery	60.00
2.	Floriculture and gardening	10.00
3.	Model Floriculture Center	10.00
4.	Horticulture fair and Exhibition	7.00
5.	Horticulture Training and Education	1.50
6.	Mushroom Development Programme	17.00
7.	Horticulture Information	6.00
8.	Fruits Preservation Programme and Processing	5.00
9.	Bio-control laboratory	7.00
10.	CSS State Share	2.50
11.	Buildings	315.00
	Total (A + B)	972.00

3.16. The physical targets of major horticultural crops during 11<sup>th</sup> Five Year Plan, anticipated achievement during 2007-08 and target for Annual Plan 2008-09 are as under:-

(Area in hect., Production in MT)

Crops	Target for 11 <sup>th</sup> Plan Anti. Achieveme		ievement	Proposed targets		
1	2007-12		2007-08		2008-09	
	Area	Prod.	Area	Prod.	Area	Prod.
Fruits						
Apple	100300	72723	16060	12397	18060	13388
Kiwi	5290	2050	598	250	798	300
Citrus	169630	212221	29626	36175	31626	39069
Pineapple	86245	284104	13349	48428	14849	52302
Banana	37790	117021	6558	19948	7058	21543
Walnut	43000	466	6600	79	7600	86
Other fruits	16500	41332	7000	22000	8000	23000
Total fruit Crops	458755	729917	79791	139277	87991	149688
Spices						
Black pepper	23100	1030	3620	176	4120	190
Large	7000	3000	10142	765	11642	830
Cardamom						
Ginger & Others	4000	70000	8386	40641	9000	50000
<b>Total spices</b>	34100	74030	22148	41582	24762	51020

#### **Soil and Water Conservation**

- 3.17. Under Soil and Water Conservation sector cultivable land are protected from soil erosion though land development and land reclamation works and these works are being taken up under the assistance of Central Govt. In order to enhance productivity in the degraded land and in flood prone rivers- valleys, two projects namely River Valley project/ flood prone rivers at Dikrong and Jia Bhoroli catchments are under execution by the department. So far 1300 hectares along with 317 nos. structures has been achieved and 880 hectares and 175 nos. structures have been targeted this financial year. There are 394 nos. spill over schemes which could not be completed due to paucity of resources. Further, there are many completed projects which are in deplorable condition due to non maintenance since last couple of years.
- 3.18. Following on-going programmes of State Plan will continue to implement during Annual Plan 2008-09.
  - Land development, land reclamation and land protection works.
  - Soil survey and laboratory testing of soil samples, education and training and land use planning etc.
- 3.19. The outlay proposed for Annual Plan 2008-09 is Rs.1143.00 lakh.

## **Animal Husbandry and Dairy Development**

- 3.20 Livestock sector plays a pivotal role in the socio-economic development of rural masses in the State, as the local people are basically agrarian by occupation. This sector has great potential for employment generation in addition to poverty alleviation and enhancing economic status.
- 3.21 The department maintains 11 nos. Cattle Breeding Farms, 16 nos. Poultry farms, 6 nos. Pig breeding farms, 1 no. Mithun Breeding farm and 1 no. Sheep breeding farm. Although, in terms of revenue returns from the existing farms could not make any visible achievement, but on the contrary, maintenance of these farms will serve as a nucleus for superior germ-Plasm to assist the livestock farmers in the field of Dairy development activities, the department is carrying out the task of augmentation of production of Milk, and other dairy products. It is proposed to initiate livestock development activities in different districts to facilitate development of a particular district to enhance productivity and in the process will attract private entrepreneurs to invest in this sector. The department is also proposed 50% subsidy for opening of small dairy unit.

#### 3.22 Focus during Annual Plan 2008-09

- Genetic up-gradation of cattle and buffalo through AI network and delivery of breeding services to farmers.
- Developing animal health services for protecting of livestock with special emphasis on conservation and management of indigenous species of animals.
- Disseminating appropriate technologies in the field of animal production/management and health care.
- Promotion of cultivation of nutritious feed, fodder crops and trees to

- improve animal nutrition and improve productivity of pasture lands.
- Strengthening marketing infrastructure for livestock products.
- Transfer /dissemination of appropriate technology in animal production, management and health care.
- Improving processing facilities with emphasis on modernization of abattoir and feed milling units.
- Measures for harnessing the private entrepreneurs, Self Help Groups and other voluntary agencies.
- Improving the database for livestock and its products.

#### 3.23 Major Development Programmes during Annual Plan 2008-09:

Following on-going programmes of State Plan and Centrally Sponsored Schemes will continue to implement during Annual Plan 2008-09:

#### **Animal Husbandry**

- 3.24.1. **Vety. Service and Animal Health Programme:** Under this scheme it is proposed to maintain all the existing Veterinary Dispensaries, hospitals, Aid centres, Diagnostic laboratory of districts and 3 Disease Investigation Laboratories. The extensive animal health coverage has been the prime activity of the department. The disease outbreak has been brought down considerably. An amount of Rs. 530.00 lakh has been proposed during 2008-09.
- 3.24.2. **Cattle and Buffalo Development Programme:** It is proposed to invest Rs.170.00 lakh for introduction of frozen semen technology and AI centers along with 120 nos. cattle upgrading centers. The department has proposed to improve the local cattle population for augmenting milk production and the existing Cattle Breeding Farms.
- 3.24.3. **Poultry Development Programme:** It is proposed to invest Rs. 70.00 lakhs for this scheme. Vigorous effort by the department has resulted tremendous improvement in this sector. The nodal centers of poultry development programmes are the Central Poultry Farm and Hatchery at the Capital and 15 district poultry farms that cater to the needs of all the districts.
- 3.24.4. **Sheep and goat rearing:** For augmentation of wool production, it is proposed to invest Rs.5.50 lakh to take care of maintenance of existing Regional Sheep breeding farm and its extension centers.
- 3.24.5 **Pig rearing:** It is proposed to invest Rs. 27.56 lakh to improve the traditional system of pig rearing through demonstration at pig farms established at different locations of the State. These govt. farms aim to produce crossbreed piglets for distribution to farmers and generate more employment opportunities through pig rearing which have immense scope and potential in the State.
- 3.24.6 **Livestock development programme:** The department has proposed to invest Rs.20.00 lakhs to initiate various programmes on conservation and propagation of indigenous species like Mithun, Yak etc. besides, strengthening the only Mithun breeding farm of the State.

- 3.24.7. **Feeds and fodder development programme:** For maintenance of central fodder farm and other farms attached with all the District Dairy farms of the State, the department has proposed to invest Rs. 50.00 lakh during 2008-09.
- 3.24.8. Extension and training programme: To maintain the only School of Vety. Science at Pasighat, which imparts regular training to para-veterinarians and organises periodical short-term training, a sum of Rs.56.94 lakhs has been proposed. To fulfill the manpower requirement of the State, students are sponsored for graduate courses besides deputing in-service personnel for post graduate diploma and degree courses in various Universities.
- 3.24.9. **State Share for Central Sponsored Schemes:** For implementation of 5 nos. ongoing Central Sponsored Schemes, viz., Professional Efficiency Dev. Programme, Integrated Sample Survey, Fodder Dev. Programme, Carcass Utilization plant and Assistance to State for control of animal diseases, an amount Rs. 50.00 lakh is proposed for State matching share.

#### **Dairy Development**

- 3.25 To involve farmers for rearing dairy cattle to meet the demand of milk and for maintenance of integrated dairy development project, Rs.70.00 lakh is proposed during 2008-09.
- 3.26 The outlay proposed for Annual Plan 2008-09 is Rs.1200.00 lakh under Animal Husbandry and Rs.70.00 lakh under Dairy Development respectively. The schematic outlays proposed for Annual Plan (2008-09) are as follows:

(Rs. in lakh) Major Heads/Minor Heads of Annual Plan Development (2008-09)2 A. Animal Husbandry Direction and Administration 220.00 Vety. Services & Animal Health 530.00 Cattle & Buffalo Development 170.00 Poultry Development 70.00 Sheep & Wool Development 5.50 Piggery Development 27.56 Feed & Fodder development 50.00 Other livestock Development 20.00 Extension and Training 56.96 State Share for Centrally Sponsored 50.00 Scheme Total: Animal Husbandry 1200.00 70.00 B. Dairy Development Projects Total (A+B) 1270.00 3.27 The physical targets proposed for Annual Plan 2008-09 in respect of major products are given below:

Items	Units	Target for	Anti	Target
		11th Plan	Achiv	Annual Plan
		(2007-12)	during	(2008-09)
			(2007-08)	
1	2	3	4	5
a) Milk	000 MT	53.00	49.00	49.50
b) Egg	Million Nos	42.00	39.00	39.50
c) Wool	'000 Kg	70.40	60.60	60.80
d) Meat	'000 MT	22.60	21.00	21.40

#### **Fisheries**

3.28 Arunachal Pradesh has an estimated 7000 hectares of aquatic resources of which only about 31% has been utilized. However, despite having vast and varied fishing resources, the State is not in a position to make any visible breakthrough in pisciculture. The State Govt. has given due encouragement and impetus in this sector with a view to improve the rural economy and to generate employment. Efforts are on to boost up fish production per unit area, with R&D support provided by the various research organizations like National Research Center on Cold Water Fisheries (NRCCWF), Bhimtal Central Inland Fisheries Research Institute (CICFRI, Barrackpore), Central Inland Fisheries Technology, Kochin, Central Institute of Fresh Water Aquaculture (CIFA), Bhubaneswar, besides Ministry of Agriculture, NEC etc.

#### 3.29 Thrust areas during Annual Plan 2008-09.

- Maximizing fish production through adoption of appropriate technologies.
- Acceleration in the employment sector on creation of infrastructure facilities.
- Streamlining procurement & marketing facilities.
- Mobilizing awareness campaign for effective aquatic resource conservation & management.
- Operational emphasis on programmes like Rural Aquaculture, Paddy-Cum-Fish-Culture, Reclamation/Renovation of beels/ lakes, existing Government firms/ nurseries etc.

#### 3.30 Major Development Programmes Annual Plan 2008-09.

Following on-going programmes of State Plan and Centrally Sponsored Schemes will continue to implement during Annual Plan 2008-09.

#### **State Plan**

- Integrated Fish Farming (Paddy-cum-fish Culture).
- Const. of Fish Farm / Fish Seed Farm.
- Cold water fish Culture including Trout culture.
- Reclamation of Beels/Lakes etc.
- Misc. & other supporting scheme.
- Fisheries Extension Programme.

#### **Centrally Sponsored Scheme with State Share**

- Development of Inland Aquaculture (75:25).
- Fisheries Extension & Training (80:20).

#### **Central Sector Schemes**

- Fisherman Welfare Schemes (50:50).
- Cold Water Fisheries & Aquaculture (75:25).
- Strengthening of Database and Information Networking in Fisheries Sectors (100%).
- Post Harvest Technology (100%).
- 3.31 The outlay proposed for Annual Plan 2008-09 is Rs.360.00 lakh. The schematic outlays proposed for Annual Plan 2008-09 is as follows:

(Rs. in lakh)

	(IXS. III Iakii)
Major Heads/Minor Heads of	Annual Plan
Development	2008-09.
1	2
Direction and Administration	219.00
Paddy cum Fish Culture	3.00
Maintenance / Impvt. Of Govt. fish farm	15.00
Cold Water Fish Culture	5.00
Reclamation of Beels and Lakes	2.00
Fresh Water Aquaculture	30.00
Cold Water Fisheries	13.00
Fisheries training and extension	4.00
Publication	0.90
Extension & Training (Stipend)	1.10
Transport	35.00
Misc. and others support	16.00
Buildings	16.00
Total :-	360.00

3.32 The physical targets for Eleventh Plan, anticipated Achievement of 2007-08 and target for Annual Plan 2008-09 are as under:

		Target for	Anticipated	Target for
Items	Units	11th Plan	achievement	Annual Plan
		(2007-	2007-08	(2008-2009)
		2012)		
Fish Production	,000	4.60	2.80	2.85
	Tonnes			
Fish Seed (Fry) Production	Millions	50.00	4.00	40.00
Fingerlings distribution	Millions	40.00	11.50	11.75
Fish Seed Nursery	На		0.50	0.50
Integrated Fish Farming	На	400.00	741 ha(E),	700 ha(E),
			61 ha (A)	100 ha(A)
Reclamation of beels/ lakes	На	Dev. of	Maint. of	Maint. of
		300 ha	beel/lakes	beel/lakes
		beel		

Development of fresh water aquaculture	На	350 ha, 100 Trg.	75 ha, 150 nos. trg.	98 ha & Trg160 farmers
Fisherman welfare scheme	Nos	All	160 unit	320 unit
(Construction of Houses)		Districts		

## Forestry, Wild Life, Ecology & Environment

3.33 In Arunachal Pradesh, out of the total geographical area of 83,743 Sq.km, the recorded forest area is 51540 Sq. kms. covering about 62% of the total geographical area. The State Govt. has notified the following areas as Reserved Forests, Sanctuaries and National Parks etc.

Reserved/ Protected Forests	9552.32 Sq.Km.
ARF/VRF	625.37 Sq.km
National Park	2290.82 Sq.km
Wildlife Sanctuary & Orchid Sanctuary	7237.17 Sq.km
Protected Area	7.80 Sq. km
Total	19713.48. Sq.km

3.34 Important forests species found in the State are tropical evergreen, semi-evergreen, deciduous, Pine, Temperate, Alpine and grassland etc. The wildlife of the State is rich and varied. Arunachal Pradesh is the happy home of animals like elephant, tiger, leopard, jungle cat, white browed gibbon, red pandas and musk deer and mithun. There are two numbers of National Park at Namdapha and Mauling and ten Wild Life Sanctuaries at Mahao, Pakhui, Dying Ering, Kane, Eagle's Nest, Kamlang, Itanagar, Dibang, Tele and Ydi-Rebe-Supse Tiger reserve at Namdapha and Pakke, Elephant reserves at Kamlang ER & Deomali ER and Orchid Sanctuary at Sessa.

#### 3.35 Priority and thrust Areas during Annual Plan 2008-09 Priority Areas

- Improvement and strengthening of institutional arrangements.
- Development and adoption of improved plant techniques for increasing forest productivity.
- Use of modern technologies such as remote sensing, GIS and creation of database and updating of forest inventory.
- Participatory forest management and involvement of communities.
- Integrated approach to fulfill the needs of the people.

#### **Thrust Areas**

Keeping in view the priorities and rational of forest situation, following thrust areas will be accorded:

- Strengthening of forest organizations, monitoring & evaluation, forest protection, creation of information database and need based human resource development.
- Protection, conservation, management and development of forests, wildlife and biodiversity in the notified areas.
- Forest development involving natural regeneration, afforestation and development of cane, bamboo and other non-timber forest resources including medicinal & aromatic plants.
- Social forestry programme to promote development of homestead gardens and plantations in vacant lands/jhum-lands.
- Strengthening of forestry research to conduct and intensify research on sustainable forest management with a view to improve forest productivity and for rehabilitation of orchids and other non-wood forest produces including medicinal & aromatic plants.
- Bio-diversity conservation through protected area network to strengthen existing infrastructure and by socio-economic development of the area.
- Involvement of communities in various forestry sector development programmes.

#### 3.36 Major Development Programmes during Annual Plan 2008-09

- Forest Research
- Human Resources Development and Training
- Forest Protection
- Working Plan
- Anchal Reserve Forests
- Forest Regeneration
  - (a) ANR/Afforestation
  - (b) Development of NTFP
- Forest Extension and Publicity
  - (a) Apna Van
  - (b) Avenue and Strip Plantation
  - (c) Distribution of Seedlings
  - (d) Recreation Forestry
  - (e)Publicity and Public Awareness Prog.
- Buildings and Approach Road
- Bio-diversity and Wildlife, Conservation and Protection
  - (a) Protected area management
  - (b) Zoological Park Management
- Departmental Harvesting of Forest Produces
- 50% State Share towards (CSS)
  - (a) Tiger Project
  - (b) Area Oriented Fuel wood & Fodder Project

- (c) Development of Mauling National Park
- (d) Development of Zoo
- 10% State Share towards CSS
  - (a) Integrated Forest Protection
  - (b) Project Tiger
  - (c) Development of Zoo
- 100% Centrally Sponsored Schemes
  - (a) Dev. of Eagle Nest Sanctuary
  - (b) Dev. of Itanagar Sanctuary
  - (c) Dev. of D-Ering Sanctuary
  - (d) Dev. of Kamlang Sanctuary
  - (e) Project Elephant
  - (f) Dev. of Mouling National Park
  - (g) Dev. of Tale Sanctuary
  - (h) Non Timber Forest Produce.(NTFP)

#### 3.37 Twelfth Finance Commission Grant (TFC)

An amount of Rs. 100.00 crore has been earmarked under Twelfth Finance Commission (TFC) grant for maintenance of forest area as per Working Plan prescription based on restore forest wealth available in the forest under Working plan w.e.f 2005-06 to 2009-2010 @ Rs. 20.00- crore per financial year. Anticipated achievements during 2007-08 are:

Advance work of plantation
Creation of plantation
Maintenance of plantation
Avenue plants creation
Distribution of seedlings
Creation of parks
Survey and enumeration
7762 hect.
13173 hect
4900 hect.
617500 Nos
3 Nos
1000 sq km.

The above plan schemes will be continued under TFC grant during 2008-09 also.

3.38 The outlays proposed for Annual Plan 2008-09 under Forestry & Wild Life and Ecology & Environment are Rs.3946.00 lakh and Rs. 19.00 lakh respectively. The schematic break up of outlays is as under:

(Rs. in lakh)

	(2151 111 141111)
Major Heads/Minor Heads of Development	Annual Plan
	2008-09
1	2
A. Forestry & Wild Life	
Direction and Administration	642.00
Forest Research	70.00

	1
Human Resource Development & Training	15.00
Forest Protection	100.00
Working Plan	20.00
Forest Regeneration	
a) ANR/Afforestration	5.00
Forest Extension & Publicity	
a) Assistance for raising of Apna Van	126.00
b) Avenue and Strip Plantation	10.00
c) Recreation Forestry	130.00
d) Publicity and Public Awareness	15.00
Buildings and approach road	308.00
Bio-Diversity and Wild Life Conservation	
and protection	
a) Protected Area Management	200.00
b) Zoological Park Management	100.00
Departmental Harvesting of Forest Produce	5.00
50% State Share towards CSS	
a) Tiger Project	40.00
b) Assistance for Development of Zoo	20.00
10% State Share towards IFP	80.00
Grant to Arunachal Pradesh Forest Coppn	25.00
Grant to State Pollution Board	5.00
Grant to NMBA	23.00
Grant to Medicinal Plant Board	7.00
TFC Grant	2000.00
Total (A):- Forestry	3946.00
B. Ecology & Environment	19.00
Total (A+B)	3965.00

3.39 The physical targets proposed for 11<sup>th</sup> Plan, Anticipated achievement of 2007-08 and target for Annual Plan 2008-09 are given below:

Items	Unit	Target for 11th Plan (2007- 2012)	Ant. Ach. during Annual Plan (2007-08)	Targets proposed for 2008- 09
1	2	3	4	5
ANR/Afforestration				
a) Creation of plantation	Hect	30,000	_	70.00
b) Tending of plantation	Hect	2887.00	_	-

Assistance for raising of Apna Van				
(a) Creation of Plantation including tending works.	Hect	15000	1185	1200
(b) Avenue & strip Plantation	Hect	-	Tending of avenue plants-115 Nos	-

## Cooperation

- 3.40 The Co-operative Movement was introduced in Arunachal Pradesh in 1957. The Pasighat Cooperative General Stores was the first registered Cooperative society in the State. The State has a network of 468 registered Cooperative Societies with membership of about 7, 83,330 as on date spread over entire length and breath of the State. A total of 32 branches of the State Co-Operative Apex Bank and 33 LAMPS which provide agriculture credit in the shape of crop loan to the farmers. The bank also provide medium terms loan for agriculture tools and implements through LAMPS. The Co-operative Apex Banks are not in a position to arrange the entire fund required for the purpose. Therefore, financial assistance from NABARD for financing such activities by the bank and LAMPS has been availed on the basis of Memorandum of Understanding (MoU) signed by the Government of Arunachal Pradesh and A.P State Cooperative Apex Bank Ltd. with NABARD.
- 3.41 The Cooperative Movement in the State is striving for socio-economic well being of the local people and the institutions are engaged self employment of the people at grass roots level. Economic activities like handlooms and handicrafts, dairy, poultry, fishery and besides agro-based activities are undertaken. The Apex Bank has been revived. Integrated Cooperative Development Programme with a total outlay of Rs. 2162.92 lakh under the Centrally Sponsored Scheme of NCDC has been launched to finance the targeted cooperative institutions to strengthen infrastructure for the benefit of their members and also general public. The NCDC supplements the efforts of the State Government in the shape of providing financial assistance to Cooperative Societies.
- 3.42 The Co-operative Societies are required to be strengthened financially to shoulder responsibility of marketing of agricultural and horticultural surplus produces in the State in order to provide remunerative price of the produces to the farmers. The plan schemes under Co-operation comprise of providing financial assistance to co-operative societies in the shape of loan, share capital and subsidy and also of maintaining and strengthening the department for origination, registration, inspection, audit of Co-operative Societies and control of Government and public investment in Co-operative Societies. With the growing importance of procurement and distribution, storage has become crucial. Marketing of surplus agriculture and horticulture produces is carried out by a few LAMPS and Marketing Societies in certain surplus pockets of the States. The lone Arunachal Pradesh Co-operative Marketing & Supply Federation has been providing necessary support to constituent primary consumers and marketing Cooperatives.

#### 3.43 Thrust Areas and strategy during Annual Plan 2008-09:

- Rejuvenating of Co-operative credit network
- Streamlining and strengthening of Co-operative marketing network for promotion of agriculture/horticulture through forward and backward linkages.
- Strengthening co-operative agro-based farming like dairy, fishery, piggery and poultry for augmenting production as well as generating income for rural people.
- Encouraging and propagating cooperative principles to the people for creating public awareness as well as to educate and train members and cooperative employees for smooth and efficient management of co-operative institutions.
- Bringing out new activities into the cooperative fold for creating avenues for employment of unemployed people.
- Strengthening of LAMPs and Marketing Cooperatives by way of providing them push up through various means for marketing of surplus agriculture/horticulture products for the benefit of the growers.
- Organization of various training programmes and seminars. Through Arunachal Pradesh Coop. Training Centre, Arunachal Pradesh State Coop. Union and District Cooperative Unions.

#### **Strategy**

- To revamp Arunachal Pradesh State Cooperative Apex Bank by providing required financial assistance to implement cooperative credit activities in collaboration with 33 Nos. LAMPS for the benefit of farmers.
- Strengthening of LAMPs and Marketing Cooperatives by way of providing them push up through various means for marketing of surplus agriculture/horticulture products for the benefit of the growers.
- Boost to Fishery, Poultry, Piggery & Dairy Cooperatives for development in a scientific manner.
- Promotion and propagation of forest based activities like plantation of cane, bamboo, aromatic and medicinal plants which have economic viability.
- Organization of various training programmes and seminars. Through Arunachal Pradesh Coop. Training Centre, Arunachal Pradesh State Coop. Union and District Cooperative Unions.

#### 3.44 Major Development Programmes during Annual Plan 2008-09:

Following on-going programmes of State Plan will continue to implement during Annual Plan 2008-09:

- Information and Publicity
- Education and Training
- Co-operative Union/Coop. Training Centre
- Managerial Subsidy to Cooperatives
- Assistance to Credit Cooperatives

- Assistance To Marketing & Processing Coop.
- Assistance to. To Consumer Cooperatives
- Assistance to Handloom & Handicraft Coop
- Assistance to Dairy/Poultry/Fishery/Piggery Coop
- Assistance .to Transport Cooperatives
- Assistance to Weak/Weaker/Border Cooperatives
- Assistance to Multipurpose Cooperatives
- Interest subsidy to Apex Banks and LAMPS
- Schemes under NCDC

# 3.45 The outlay proposed for Annual Plan 2008-09 is Rs. 375.00 lakh. The schematic distribution of proposed outlay is as under:

(Rs.in lakh)

Heads of Development	Annual
	Plan
	2008-09
1	2
1. Direction and Administration	222.50
2. Land and Building	35.00
3. Information and Publicity and Education	1.00
& Training	
4. Co-operative Union/Coop. Training Centre	30.00
5. Managerial Subsidy to Cooperatives	8.00
6. Assistance to Credit Cooperatives	12.00
7. Asstt to Marketing & Federation	12.00
8. Asstt to Consumer Cooperatives	8.00
9.Asstt.to Handloom & Handicraft Coop.	8.00
10.Asstt. to Dairy/Poultry/Fishery/Piggery	10.00
Coop.	
11.Asstt.to Transport Cooperatives	5.50
12.Asstt.to Weak/Weaker/Border	8.00
Cooperatives	
13.Asstt. to Multipurpose Cooperatives	15.00
Total	375.00

#### RURAL DEVELOPMENT

The poverty in Arunachal Pradesh is a rural phenomenon as about 80% of the State's population being rural. While the Arunachal Pradesh has a relatively high level of population growth over the last decade, it has posed serious problems, specially for a backward and resource crunch State like Arunachal Pradesh in terms of providing essential services and adequate opportunities for its people. The incidence of poverty in Arunachal Pradesh remained more or less static during the last two decades. There was about 59.5% of the population below poverty line at the beginning of Eighth Five Year Plan. About 54% of the rural households were living below poverty line as per BPL Census, 1997. Presently about 33.47% of the total populations of the State have been found to be below poverty line. In order to uplift the BPL families above the poverty line, emphasis has been given to create community infrastructural assets with employment opportunities for sustainable economic development through Centrally Sponsored Poverty Alleviation schemes like SGSY, SGRY, NREGA, IAY and Hariyali etc. In Arunachal Pradesh the decrease in poverty ratio has been slow compared to the rest of the country. This can mainly be attributed to (i) difficulty in coverage of large areas under poverty alleviation programmes due to the problems of accessibility (ii) declining GDP growth rate and (iii) higher growth rate of population than all India average, inter-alia because of immigration. During Annual Plan 2008-09 activities under Poverty Alleviation Programme will be intensified modeling them appropriately for their adaptability in the State.

#### 3.47 Thrust areas during Annual Plan 2008-09

- Creation of self-employment by individuals and collective efforts through Self Help Groups for taking up any economic activity and generate employment opportunities with the help of Govt. subsidies and credit available from banks.
- Generation of employment and self-confidence opportunities to women and economically backward tribal society.
- Wage employment opportunities through creation of community based infra-structural assets in order to sustain economic development.
- Assistance to construction of new dwelling houses and upgradation/improvement of existing houses to poor people.
- Development of non- forest wasteland on micro- watershed approach with the active participation of the people i.e. user groups, Self Help Group, PRIs and NGOs.
- Other programmes relate to infrastructure development of rural economy.

#### 3.48 Major Development Programmes during Annual Plan 2008-09

#### **Centrally Sponsored Schemes**

- (a) Swarajjayanti Gram Swarazgar Yojana (SGSY): An amount of Rs.300.00 lakh has been proposed for assisting 300 SHGs and 3000 individuals.
- (b) Sampoorna Gramin Rozgar Yojana (SGRY): An amount of Rs.222.00 lakh has been proposed for maintenance of existing posts.
- (c) Indira Awas Yojana (IAY): During 2008-09, an amount of Rs. 301.00 lakh has been proposed for construction of 6500 Nos. new houses and upgradation of 3600 Nos. of existing houses.
- (d) Hariyali: An amount Rs.200.00 lakh has been proposed to meet the State

- share of Hariyali during 2008-09.
- (e) DRDA Administration: There are 15 DRDAs functioning in the State. An amount of Rs. 200.00 lakh has been proposed to meet State's matching share of salaries, wages and other administrative costs of DRDAs.
- (f) So far 3 districts, namely, Upper Subansiri, Lohit and Changlang districts have been brought under NREGA and 36595 nos. rural household registered. An amount of Rs. 400.00 lakh is proposed as State's matching share towards the scheme.
- (g) SIRD: The State Institute of Rural Development is an autonomous body funding of which is met from Centre and State at the ratio of 50:50 basis for recurring expenditure. An amount of Rs.30.00 lakh has been proposed to meet the State matching share during 2008-09.

#### **State Plan Schemes**

- (a) Direction and Administration: An amount of Rs.490.00 lakh is proposed for 2008-09 which includes Rs. 355.00 lakh for maintenance of existing posts, Rs. 10.00 lakh for minor works, Rs.100.00 lakh for buildings and Rs. 25.00 lakh for procurement / replacement of vehicles.
- (b) Block Level Administration: There are 87 Nos. of C.D Blocks in the State. An amount of Rs. 612.00 lakh has been proposed for the purpose during 2008-2009.
- (c) Monitoring Cell: An amount of Rs. 30.00 lakh has been proposed.

3.49 Outlay proposed for Annual Plan 2008-09 under Rural Development is Rs. 2785.00 lakh, the schematic break-up of which is as under:-

(Rs. in lakh) Sl. Annual Plan No. 2008-2009 **Programmes** 3 Self-employment Programme i). SGSY 300.00 ii). DRDA Administration 200.00 Iii). Block Level Administration 612.00 iv). Monitoring Cell 30.00 v). SIRD 30.00 vi). Hariyali 200.00 1372.00 Sub Total (I) II. Rural Employment Programme i). Maintenance of post under SGRY 222.00 ii). National Rural Employment 400.00 Guarantee Programme Sub Total (II) 622.00 Ш Indira Awas Yojona 301.00 Other Programmes of Rural IV. 490.00 Development (State Plan) Grand Total (I+II-III+IV) 2785.00

3.50 Physical achievement under SGSY is 49 Nos. SHG, while individual Sworazgories is 93 nos. Under Sampoorna Gram Rozgar Yojana (SGRY), 1.17 lakh man-days has been generated upto November '2007. So far 1779 nos. of houses have been constructed and 937 nos. houses up-graded under Indira Awas Yajona during current year. The physical targets the 11<sup>th</sup> Plan, anticipated Achievement and targets proposed for Annual Plan 2008-09 are as under:

Programmes	Unit	Target for 11th Plan (2007- 2012)	Anticipated achievement during 2007-08	Target for Annual Plan (2008-09)
SGSY	a). No. of individual swarozgaris	20000	1968	3000
	b). No. of SHG	400	176	300
SGRY	No. of mandays of employment (in lakhs)	300.00	16.78	20.00
IAY	a). No. of new houses	30000	5412	6500
IA I	b). No. of upgradation	20000	2977	3600
Hariyali	Area in hectare.		2.00	2.00

#### 3.51 **Emerging Issues:**

- Population criteria adopted by the Govt. of India for allotments of funds under Poverty Alleviation Programmes, viz. NREGA needs to be reviewed because of thinly population and scattered nature of habitation in Arunachal Pradesh.
- The State is facing difficulties in implementation of credit linked schemes viz. Swarnajayanti Gram Swarogar Yojana where assets are to be given to the beneficiaries by providing subsidies and bank credit. The banks are not in a position to cover all existing blocks located in the remote areas of the State because of problem of pre-verification of income status of the beneficiaries and post-verification of income. So far as informal sector is concerned, the credit needs of the rural poor are characterized by absence of any clear distinction between production and consumption purposes. In the absence of patta system of land/formal documentation of land, mortgazing of land for securing loans by the local entrepreneurs is difficult as at present the financial institutions are hesitant in accepting land as security. Out of 85 blocks, 26 blocks are outside the service area of commercial banks. These commercial banks are unable to provide service beyond 25 kms radius as per the RBI directives. Therefore, it is imperative that the banking practices and procedures need to be reviewed to enable the banks to adopt a more proactive approach in lending loans to the economically viable activities in both formal and informal sectors.
- Income generation from the Centrally Sponsored Schemes is also not
  practically possible in most of the villages due to absence of forward and
  backward linkages and organized rural markets. There is hardly any
  perceptible existence of monetized economy in the far-flung areas/villages.
  In such a situation, income generation from products and repayment of
  loans is very poor for which the banks are reluctant to go for further
  investment.

• Another area of concern is the wage employment programme under SGRY, which envisages payment of wages to the workers mainly in the form of food grains as a compulsory component with some cash component. Being high cost of transportation of food grains from nearest FCI godowns in Assam coupled with absence of fair and all weather roads in the State, it is impracticable to carry food grains to remote areas. Failure to lift food grains affects cut in allocation of fund by the Central Government and this penal measure deprives the poor people to avail the wage employment avenues in a large extent. Thus, this policy is required to be reviewed by the Government of India.

## **Land Management**

- 3.52. Land Management department is entrusted with the responsibilities of creation of infrastructure for the effective management of land reforms and settlement matter. The Arunachal Pradesh (Land Settlement & Records) Act-2000 and Land Settlement & Records Rules, 2002 have been enacted. At present, there is no patta system for private land ownership in the State, as such, the State Govt. has been following a system of issue of Land Possession Certificate so as to enable the private land owners to obtain financial assistance from the financial Institutions. The Department is also attending to Land Acquisition cases for Defence, Border Roads Organisation, NGOs and Central & State Govt. departments as per procedure laid down in the Central Land Acquisition Act,1894 and as amended from time to time.
- 3.53 The revenue collected upto Nov'2007 is Rs. 2.72 crore and total area of land surveyed is Rs. 92.422 hectares. The department has proposed to carry out cadastral survey/ settlement operation in the Annual Plan 2008-09 in a phase manner under pilot project to be funded by the Ministry Rural Development, Govt. of India

#### 3.54 Major Development Programmes during Annual Plan 2008-09:

- Cadastral survey of land, preparation of records of right and creation of surveyed area maps, collection of land revenue.
- Demarcation of State and individual plot boundaries and fixation of pillars for town, village and individual land holding.
- 3.55 Outlay proposed for Annual Plan 2008-09 is Rs. 175.00 lakh.
- 3.56 The physical targets proposed for  $11^{th}$  Plan ,anticipated achievement of 2007-08 and target for Annual Plan 2008-09 are as under:

			Anticipated	Target for
Item	Unit	Target for	achievement	Annual
Helli	Ullit	11 <sup>th</sup> Plan	2007-08	Plan
				2008-09
Survey of land	Hectare	75,000	41,422	15,000
Collection of	Rs. In	1000.00	272.87	200.00
Land revenue.	lakh			

## Panchayati Raj

3.57 Three tier Panchayati Raj bodies constituted under NEFA Panchayati Raj Act, 1967 was dissolved with effect from September14<sup>th</sup>, 1997. The new Arunachal Pradesh Panchayati Raj Act, 1997 came into force with effect from 14<sup>th</sup> November, 2001 and the first Panchayat election was held on 2<sup>nd</sup> April' 2003 for electing Zilla Parishad, Anchal Samiti and Gram Panchayat members. In order to implement all the provisions envisaged in the Act, the department has framed various Rules/ Acts. It is proposed to strengthen the process of democratic de-centralization by way of devolution of power to the Panchyati Raj bodies as per the Eleventh Schedule of the Constitution. The PRIs will be particularly involved in the planning and execution of rural based schemes and to augment revenue generation. The department has constituted District Planning Committee (DPC) as per Govt. of India norms. Further, State Panachayati Raj Advisory Committee has also been constituted.

#### 3.58 Objectives and thrust during Annual Plan 2008-09:

- To translate into action the obligatory provisions enshrined in the Arunachal Pradesh Panchayati Raj Act, 1997, and
- Empowerment of people in democratic decentralization, economic upliftment and ensures social justice from grassroots level.
- 3.59 The outlay proposed for Annual Plan 2008-09 is Rs. 105.00 lakh.

#### SPECIAL AREA PROGRAMMES

## **Border Area Development Programme**

3.60 The Border Area Development Programme was started in the year 1997-98 initially for the Indo-Myanmar Border of the State with a provision of Rs.400.00 lakh. From 1998-99 the programme was extended to the international border of Indo-China and Indo-Bhutan also with a view to meet the special needs of the people and to remove the critical gaps in physical and social infrastructural needs and promotion of sense of security amongst the local population living in the border blocks. District Committees constituted under the chairmanship of respective Deputy Commissioners, are involved in formulation of viable projects/schemes. The proposals approved by the State Level Screening Committee on BADP are forwarded to Planning Commission for formal approval and release of fund. The Planning Commission releases the fund in two installment to the State Govt. for taking up of schemes in the border blocks. The fund is allocated to the concerned implementing Deputy Commissioners and the Para-Military Forces, viz., Assam Rifles, SSB, ITBP and the Arunachal Police for implementation of need-based schemes approved by the State Level Screening Committee.

3.61 The necessity of developing the border areas along the Indo-China, Indo-Mayanmar and Indo Bhutan with a total length of 1680 km has now become imperative in view of the development efforts particularly made by China in terms of infrastructure and services on their side to international standards. In order to break the syndrome of isolation and to arrest exodus of people from border areas, building up of basic minimum infrastructure are urgently required.

#### 3.62 The programme is implemented in the following 33 Nos. border blocks:

Name of the District	Name of the Block	No. of Villages	Population (2001 census)	Remarks
1	2	3	4	5
Indo-Bhutan (160 km)				
Tawang	1) Jung-Mukto	47	10716	Falls both under Indo-China and Indo-Bhutan
	2) Lumla – Zemithang	56	10446	Falls both under Indo-China and Indo-Bhutan
West Kameng	1) Kalaktang	48	17653	
	2) Dirang	68	18474	Falls both under Indo-China and Indo-Bhutan
Total		219	57289	
Indo-China (1080 km)				
Tawang	1) Tawang	80	17742	
West Kameng	1) Nafra	29	13644	

East Kameng	1) Bameng	69	9244	
C	2) Chayngtajo	68	10881	
17 17	1) Huri-Damin	32	2957	
Kurung Kumey	2) Pipsorang	32	2206	
	3) Sarli	36	1951	
	4) Koloriang	52	4798	
	5) Parsi-Parlo	43	3226	
Upper Subansiri	1) Nacho	65	5249	
11	1) 1(0010		02.19	
	2) Siyum	48	4080	
West Siang	1) Mechuka	45	6244	
The state of the s	2) Monigong	34	3025	
	3) Kaying-Payum	25	5543	
Upper Siang	1) Tuting	16	5874	
	2) Singa-Gelling	18	1692	
Lower Dibang Valley	1) Hunli	41	3114	
	1) Anini-Mipi	38	4344	
Dibang Valley	2) Etalin-			
,	Maliney	28	1575	
	3) Aneli-Arzoo	34	1353	
Anjaw	1) Chaglagam	42	2359	
	2) Hayuliang	92	10262	
Total		967	121363	
Indo-Myanmar (440				
km)				
Anjaw	1) Hawai-Walong	80	6845	Falls both under
				Indo-China and
				Indo-Myanmar
	2) Manchal	56	3032	Falls both under
				Indo-China and
	1) 771 '	40	5250	Indo-Myanmar
	1) Khimyang	40	5270	
Changlang	2) Nampong-	70	15055	
	Manmao	70	15255	
	3) Khagam	83	34463	
	1) I	17	7057	
Tiron	1) Lazu	17	7957	
Tirap	2) Pongchou- Wakka	23	19662	
T1-1	vv anna			
Total		369	92484	
Grand Total		1555	271136	

3.63 Outlay proposed for Annual Plan 2008-09 is Rs. 4733.00 lakh.

# Backward Regions Grant Fund (Erstwhile Rashtriya Sam Vikas Yojana)

3.64 This programme is implemented in Upper Subansiri District, which was identified by the Planning Commission under the Backward Districts Initiative during 2004-05 with a focus on filling up critical gaps in social and physical infrastructure so that obstacles in the path of socio-economic development and employment generation in the district are overcome on a time bound manner. The Planning Commission has so far released Rs.22.50 crore @ Rs. 7.50 crore in three equal installments from 2005-06 out of Rs. 45.00 crore approved earlier and necessary utilization certificates against released amount have already been submitted to the Ministry of Panchayati Raj, Govt. of India. The State Government has delegated financial power up to Rs.15.00 lakh for according administrative approval and expenditure sanction for each scheme to the Deputy Commissioner. The NABARD has been entrusted with the responsibility of monitoring the schemes of BRGF. An amount of Rs. 15.45 crore is proposed for Annual Plan 2008-09.

## **Department of Tirap and Changlang Affairs**

3.65 The Department of Tirap and Changlang (DoTC) was created during 2003-04 with the objective of catalyzing the developmental activities in two backward districts, viz. Tirap and Changlang districts of Arunachal Pradesh and provided Rs.2500.00 lakh annually to the DoTC as a special allocation for implementation of schemes like cultivation of tea and other cash crops as well as schemes/projects related to urgent humanitarian and control of epidemic outbreak in close coordination with the departments concerned.

3.66 During Annual plan 2008-09 an amount of Rs. 2500.00 lakh has been proposed.

#### IRRIGATION & FLOOD CONTROL

- 3.67 Irrigation activity in the State remains concentrated mostly around minor irrigation projects, which are mainly surface flow type. The hilly terrain of Arunachal Pradesh does not offer scope for large irrigation projects. A few ground water schemes have been taken up in the foothill areas of Arunachal Pradesh based on the potential studies done by the CGWB. The irrigation potential in the State is only 27% as compared to 60% of All India average.
- 3.68 A potential of 1, 14,659 hect. has been created up to 31<sup>st</sup> March' 2006 under Minor Irrigation against estimated potential of 3.60 lakh hect. The development of ground water potential in the State is negligible. With the depletion of surface water resources in the foot hill areas of Arunachal Pradesh, especially in Changlang, Lohit, Lower Dibang Valley, East Siang, Papum Pare and East Kameng Districts, necessity of ground water for meeting the requirements of drinking water and irrigation are increasing day by day. The CGWB had assessed a irrigational potential about 18,000 hect through ground water in the State. The potential created so far is only 630 hect. There is a huge gap of about 60% in creation and utilization of irrigation potential in the State. To minimize the gap of potential created a large dose of investment is required. There are 3 Nos ongoing CAD schemes having 50:50 funding pattern under Centrally Sponsored Scheme.
- 3.69 Flood is a recurring phenomenon in the State due to high precipitation. Magnitude of floods and river bank erosion problems are increasing every year in the State. To tackle the flood problems, construction of embankment, spurs and guide bunds etc. are utmost necessary. Presently, protection and restoration works have been taken-up on piece-meal basis in the flood affected river basins of Arunachal Pradesh due to want of adequate resources.

#### 3.70 Thrust areas during Annual Plan 2008-09:

- Completion of on-going irrigation projects as well as taking up the new schemes in potential areas.
- Adoption of technically advanced and moisture conserving methods of irrigation like Sprinkler and Drip in the water scarce areas, especially for irrigation in orchards, tea and vegetable gardens etc.
- Undertaking Ground Water Survey and exploitation of ground water for irrigation in the foothill areas of the State.
- Maximizing utilization of created potential through augmentation, renovation and proper maintenance of irrigation projects and other Command Area Development Works.
- Peoples' participation in the management of M.I. Projects for better utilization of potential.
- Survey and Investigation of Flood Plan Zones towards evolving comprehensive flood management, both long and short term period.
- Setting up of Hydro-Meteorological observations, Gauge-Discharge and Silt load monitoring stations for effective planning of flood control and other water resources projects.
- Strengthening of existing infrastructure.

#### 3.71 Major Development Programmes during 2008-09:

- Major and Medium Irrigation: The undulating topography of State offers no scope for Major Irrigation Projects. However, the foothill belts of Arunachal have irrigable lands to be taken up as medium irrigation projects. So far three Detailed Project Reports for Pappu Valley in East Kameng, Deopani Multipurpose project in Lower Dibang Valley and Paya, Hati Duba, Yeliang and Zeko in Lohit district have been completed by the department. Further, the Department has also taken up survey and investigation of medium irrigation at Sille Remi in East Siang District. The DPR is anticipated within the current year. This project is expected to cater irrigation potential of about 3000 hectares. An amount Rs. 72.00 lakh is proposed for Annual Plan 2008-09.
- Minor Irrigation: Although the geographical area of the State is large, the irrigable area through minor irrigation is limited to about 2% of geographical area. Command areas in small patches are scattered mostly in the mid belt and the foothill belt of Arunachal Pradesh. The region is geologically very fragile and this situation combined with high rainfall intensity and duration frequently cause damages to the constructed irrigation structures. The extent of damages is sometimes irreparable by the farmers and mostly kept un-attended due to resource constraint. The net irrigation potential of the State is estimated to be 1.80 lakh hectare through surface water and 0.09 lakh hectares through ground water. Out of the available potential, the achievement made is about 1, 14,103 lakh hectares till 2006-07. Under this sector, 408 Nos. of AIBP schemes and 34 Nos. State sector schemes have been spill over to 2007-08 as on-going schemes. An amount of Rs. 7650.00 lakh is proposed for Annual Plan 2008-09.
- Ground Water irrigation: The development of ground water potential in the State is negligible. With the depletion of surface water resources in the foot hill areas of Arunachal Pradesh, especially Changlang, Lohit, Lower Dibang Valley, East Siang, Papum Pare and East Kameng Districts, necessity on ground water for meeting the requirements of drinking water and irrigation are increasing day by day. The CGWB had assessed an irrigational potential about 18,000 hectares through ground water in the State.
- Command Area Development (CAD): There is a huge gap of about 60% in creation and utilization of irrigation potential in the State. To minimize the gap of potential created a large dose of investment is required. The Ministry Water Resources has approved 2 nos. of new cluster CAD schemes Rs. 3200.00 lakh with funding pattern of 50:50 during April'2006. Implementation these schemes are in full swing. A sum of Rs. 360.00 lakh is proposed for Annual Plan 2008-09.
- **Flood Control:** Flood is a recurring phenomenon in the State due to high precipitation. Magnitude of floods and river bank erosion problems are increasing every year in the State. To tackle the flood problems, construction of embankment, spurs and guide bunds etc. are utmost

necessary. Presently, protection and restoration works have been taken-up on piece-meal basis in the flood affected river basins of Arunachal Pradesh due to want of adequate resources. The projected outlay for 2008-09 is Rs. 675.00 lakh with a physical target of 650 hectares for flood protection works. There are 167 Nos. of ongoing schemes of Tenth Five Year Plan requiring Rs. 408.00 lakh for completion.

## 3.72 The department requires Rs. 561.00 lakh as 10% state share on following CSSs:

- (a) Critical flood control and anti erosion schemes under Barhmaputra and Barak valley programme for 3 nos. ongoing and 10 nos. new schemes-Rs. 423.70 lakh,
- (b) 4 nos. NEC ongoing schemes- Rs. 54.11 lakh, and
- (c) 1 No. NLCPR ongoing schemes- Rs. 38.18 lakh.
- 3.73 The outlay proposed under this sector for Annual Plan 2008-09 is Rs.8757.00 lakh. The head-wise distribution of the same is as under:

	(Rs. in lakh)
Heads of Development	Proposed
	Outlay Annual
	Plan 2008-2009
1	2
1. Major & Medium Irrigation	72.00
2. Minor Irrigation	7650.00
3. Command Area Development	360.00
4. Flood Control	675.00
Total:	8757.00

3.74 The physical targets proposed for 11<sup>th</sup> Plan, Anticipated achievement during 2007-08 and targets for Annual Plan 2008-2009 are as under:

Item	Unit	Target for 11 <sup>th</sup> Plan (2007-12)	Anticipated achievement 2007-08	Target Annual Plan 2007-2008
1	2	3	4	5
Minor Irrigation	На	42000	7650	7600
Command Area	Ha	5600	800	1000
Development				
Flood Control	На	6200	650	650

#### 3.75 **Emerging Issues:**

• The undulating topography of Arunachal Pradesh does not cater large irrigable command area in a compact area. The irrigable command areas are limited only in small patches of about 15 to 10 hect in the river valleys and plateaus. Therefore, the existing eligibility criteria under AIBP for inclusion of minor irrigation schemes may be relaxed from 20 hect for individual schemes and 50 hect for cluster schemes to 5 hect and 20 hect respectively as a special case. With this, the valuable land resources of hilly states could be brought under irrigation.

- The existing irrigation structures are always prone to water related natural calamities and rendered defunct. Maintenance and repairs of such damaged infrastructure remain unattended due to resource constraint of the State. Therefore, resource support from the centre for reconstruction and rejuvenation of damaged projects are urgently required. For tapping the ground water potential, formulation of an appropriate Centrally Sponsored Scheme is imperative.
- The State is availing the CSS Command Area Development and Water Management (CADWM) to address the institutional support to the WUA. There exists a utilization gap of about 55%. In order to increase the utilization area in consonance with the potential creation, enhancement of the Central share of CADWM from existing 50% to 90% is required.

#### **POWER**

## **Hydropower**

- 3.76 It is estimated that out of about 1,40,000 MW hydro-power potential of the country, 56,151 MW is available in Arunachal Pradesh from five major river basins running in the North-South direction. With further exploration, the hydro potential may well exceed 60,000 MW. The hydro power potential of this State would exceed 56,151 MW from mega power projects, if investigated further in detail.
- 3.77 Notwithstanding above, the present domestic power scenario in the State is far from satisfactory. The present installed capacity is only about 440.19 MW under both Central Sector and the State Sector. The reason being, very slow pace of development of Micro / Mini / Small hydro projects mainly attributable to acute resource constraints of the State. Presently, the peak power demand in the State is about 105 MW. This domestic requirement of the power in the State is partly met from 63 Nos. of Micro / Mini / Small hydel stations with installed capacity of 35.19 MW (firm capacity 22 MW), partly from diesel generating sets (17.14 MW) and import from Central Sector Power (19 MW). However, there is still power shortfall of 46.86 MW. Hence, there is the urgent need of bridging the demand-supply gap, in order to achieve the target of all village electrification and all household electrification by 2012 as per Govt. of India's policy announcement.
- 3.78 Recently the Government of Arunachal Pradesh has liberalized Private Sector participation (both Indian and Foreign) in the development of hydroelectric and gas based projects in the State. In consonance with the National Power Policy, the Government of Arunachal Pradesh has adopted the Hydro Electric Power Policy'2005 for development of 56,151 MW hydro power potential in a very eco-environment and people-friendly manner involving least or no disturbance to the ecology and avoiding large scale submergence, displacement of people and consequent rehabilitation and resettlement problems. The policy not only endeavors to make the State power sufficient but also envisages to bridge the power shortfall in the nation which is presently about 1, 00,000 MW The State Power Policy 2005 envisages development of the hydropower projects on Build, Own, Operate and Transfer (BOOT) basis. At least 12% of the power generated would be supplied free of cost to the State by the developers and where the State Govt. has to purchase power generated in the private sector, it will enter into a Power Purchase Agreement with the private party. So far the State Government signed MoUs and MoAs with thirty five private developers viz., Reliance Energy Ltd. (REL), Jay Prakash Associates Ltd.(JAL), D.S. Construction Ltd. (DSCL), Bhilwara Energy Ltd., Mountain Fall India Private Ltd., GMR Energy Ltd. and KSK Electricity Financing India Private Ltd. etc. for construction of macro hydel projects. The State Govt. also plans to execute selected power projects by participating in equity of Special Purpose Vehicles (SPVs) formed with successful bidders for executing the projects. Since the quantum of funds required for the equity will be in thousands of crores, the Govt. of India can assist the State Government by contributing to the equity and if not, then assisting in getting cheap long term loans, if required. For evacuating the power so generated, sufficient intra-state and inter state grid lines will be required for which also, assistance will be required.
- 3.79 Out of 56,151 MW power potential, the State Govt. has already allotted 53 Nos. of HEPs totaling 24,087.50 MW to various CPSUs & Private Power Developers for implementation on BOO and BOOT basis respectively. During the 11<sup>th</sup> Plan capacity

addition of 2710 MW is being targeted under PM's 50,000 hydro initiative in the State. Capacity addition of 2,710 MW has been targeted in the Central Sector by end of 11<sup>th</sup> Plan. Thus, 3115 MW (i/c Ranganadi HEP – 405 MW) of power shall be available from HEPs in the Central Sector by end of 11<sup>th</sup> Plan. With total power of 3206.19 MW both from the State Sector (91.19 MW) & Central Sector (3115 MW) available by end of 11<sup>th</sup> Plan, the State would be in a position to earn revenue in the order of Rs.600.00 Cr. Moreover, upon development of 56,151 MW Hydro power potential already identified, the State is expected to earn revenue exceeding Rs. 9,000.00 Cr. annually. However, to make the huge power available to the consumers in the State as well as the nation, the required infrastructure for evacuation of the power are needed to be put in place. In this context, there is a need for inter-ministerial co-ordination between the Ministry of Power and the Ministry of Environment & Forest at the Center for expediency of the National programme for development of Hydro Power Projects in Arunachal Pradesh.

- 3.80 The department is implementing hydel projects under RIDF. Presently five projects, namely, Liromoba MHS (2MW) in West Siang District. Pacha SHP (3MW) on East Kameng District, Angong Nallah SHP (4.50 MW) in Upper Siang District and Subung SHP (3MW) in East Siang District, Teepani MHS (0.50 MW) in Anjaw District are under construction and funded by RIDF- VII, XI & XII. Out of the above RIDF projects Liromoba SHP (2 MW), Pacha SHP (3 MW) and Teepani MHS (0.50 MW) are contemplated to be completed during 2007-08.
- 3.81 There are three projects, namely, Kitpi Ph-II SHP (6 MW) in Tawang District, Rina MHS (2MW) in East Siang District and Halaipani SHP (12 MW) in Anjaw District being funded by REC. Rina MHS (2 MW) is being targeted for completion by the end of financial year 2007-08, so as to minimize the power deficit of East Siang District, particularly, the Pasighat township.

#### 3.82 Focus & Thrust Areas:

- Exploration and exploitation of power potential estimated of 26747 MW (at 60% load factor) is available in Arunachal Pradesh.
- Survey and Investigation.
- Completion of on-going projects which are under different stages of execution.

#### 3.83 **Major Development Programmes during 2008-09:**

Following on-going programmes of State Plans and Centrally Sponsored Schemes will continue to implement during Annual Plan 2008-09:

#### **State Plan**

- **Hydel Generation:** There are 62 Nos. of ongoing schemes under Hydel Generation. Out of 62 Nos. going schemes, 10 Nos. schemes are commissioned but liabilities are yet to be cleared. An amount of Rs. 1623.00 lakh is propose under hydel generation (normal) during Annual Plan 2008-09. Further, outlay of Rs. 2150.00 lakh has been proposed under loan linked schemes and Rs. 1000.00 lakh under EAP. Thus, the total outlay under hydel generation is Rs. 4773.00 lakh during 2008-09.
- **Hydel Improvement:** Renovation & modernization of old aged existing hydel stations is very much essential. An amount of Rs.400.00 lakh is proposed for 11 Nos. schemes during Annual Plan 2008-09.

- Survey and Investigation: The State has huge hydro power potential both in terms of micro/ mini/ small and mega projects. The potential can be exploited only when the feasibilities are established. In order to establish the technical feasibilities, necessary S&I works are needed to be carried out. An outlay of Rs.2.00 lakh proposed for 38 schemes for survey and investigation.
- Maintenance of Assets: The department is required to maintain 63 Nos. of hydel Stations with installed capacity of 35.19 MW. There has been capacity addition of 1.16 MW from five projects. Thus, there has been addition of committed liabilities towards operation & maintenance of the hydel stations. Further, lager number of residential & non- residential buildings, numbers of machineries and equipments such as, heavy T & P's (Excavator, Bull Dozer etc.) light inspection vehicles etc. are also to be maintained for deployment against various works/projects. An outlay of Rs. 800.00 lakh has been proposed against this sub-head.

#### **Centrally Sponsored Schemes**

- MNRE: There are 23 Nos. of ongoing schemes under MNRE. So far as implementation of projects under MNRE is concerned it has been observed that the project cost for small hydro projects (2 MW to 25 MW) averages about Rs. 8.00 crore per MW for this State. The corresponding percentage of admissible capital subsidy with respect to the estimated cost of these small hydro projects comes around 33% for 2 MW and subsequently tapers down to 11% for 25 MW projects. It implies that the State Share correspondingly has to be 67% to as high as 89 % which has a huge financial implication to be resourced under State Plan alone. Therefore, appropriate fund pattern by MNRE for small hydro projects needs to be reviewed.
- 3.84 The outlay proposed for Annual Plan 2008-09 is Rs. 6725.00 lakh. The schematic break-up of proposed outlay is as under.

(Rs. in lakh)

Heads of Development	Annual Plan 2008-09 proposed outlay	
1	2	
Hydel Generation	4773.00	
Buildings	200.00	
Survey & Investigation	2.00	
Hydel Improvement	400.00	
Maintenance of assets	800.00	
Direction & Administration	550.00	
Total	6725.00	

## **Power (Transmission & Distribution)**

3.85 Arunachal Pradesh have neither State grid of its own nor high voltage/extra high voltage transmission lines. The total power allocation for the State from the Central Sector Projects located in the North East is 38.00 MW. But actual drawal remains low due to inadequacy of Transmission and Distribution System. Hence, there is immediate need to have proper transmission lines for drawal of its share of power from the Central Sector Generating Stations. Due to growing demand and availability of power from on-going hydel projects as well as the share from the Central Sector generating stations, there is immediate need for construction of 33 KV and 11 KV lines and sub stations and LT distribution lines including installation of distribution transformers at various load centres. Improvement in this system would minimize T & D losses. Further, there is also need for system improvement by addition of higher capacity transformers, replacement of conductors, extension of LT distribution lines in the district head quarters.

3.86 Over 54000 MW of power would be surplus in the State by the end of 2022 if its hydro-power potential is totally tapped. An ultra high capacity and ultra high voltage mega structure would be required to transmit this much amount of power to the Central load centres of India through the narrow 18 Km chicken neck corridor near Siliguri in West Bengal. As per the Indian experience, this power evacuation system would be a technological challenge, as new technology, new standards for design and development of such mega structure, capable of carrying over 40,000 MW of power are to set. Within the State of Arunachal Pradesh, development of basin pooling stations at Bhalukpong, Kimin, Pasighat and Namsai, the design of transmission systems connecting each of the mega hydro power projects and development of pulling stations will involve huge investment.

#### 3.87 Focus & Thrust Areas during Annual Plan 2008-09:

- Improvement of higher capacity transformers, replacement of conductors, extension of LT distribution lines in the district head quarters.
- Implementation of Accelerated Power Development Reform Programme (APDRP).
- Implementation of Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY).
- Completion of ongoing schemes/projects.

#### 3.88 **Major Programmes:**

• Transmission: Arunachal Pradesh is having 47 Nos. of Micro Hydro Stations of various capacities in operation with an installed capacity of 32.48 MW. Number of projects including mega project under Central and Private Sector are also coming up in the State. Rangandi, HEP has already been commissioned with an installed capacity of 405 MW (Stage-I). Construction of Kameng Hydro Electric Project (600 MW) has been started by NEEPCO. The Transmission system required for evacuation of Power from generating stations would be required on priority. Therefore, the department has constructed a State grid at 132 KV line from Ziro to Aalo via Daporijo. The construction 132 KV line with its power substation is in progress from Aalo to Pasighat under NLCPR. Another scheme of State grid at 220 KV line from Kathalguri (Assam) to Deomali has already been constructed and commissioned under NLCPR to draw Central Sector Power share of the State.

- Sub Transmission and Distribution (ST&D): In addition to development of 132 KV & 220 KV lines, the State would need to develop a new sub transmission and distribution with sub- station system to connect various load centers from the 132/33 KV or 132/33/11 KV power sub stations and improve and augment the existing transmissions, sub-transmission capacities and distribution networks to handle the increasing demand of the power. These include 33 KV Transmission line and 11 KV distribution systems.
- APDRP: Govt. of India is providing fund under APDRP scheme for improvement of Sub- Transmission and Distribution System to reduce the Transmission and Distribution losses and improved reliability of power supply. Under Accelerated Power Development Reform Programme (APDRP), improvement of sub transmission and distribution system to reduce T & D losses will be continued. The Govt. of India has sanctioned 4 Nos. schemes under APDRP. These schemes are in various stages of execution.
- Rural Electrification: The task of Rural Electrification in Arunachal Pradesh is difficult because of its topography with low density of population and scattered pattern of habitation. The progress of Rural Electrification continues to be far from satisfactory. Most of the villages are situated in the remote and inaccessible areas and also adjacent to the International Borders where Construction of T & D line is cost prohibitive. Out of the total 4593 villages only 2257 villages have been electrified so far and balance 2336 Nos. of villages for electrification have been proposed under Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY). The schemes for Papum Pare and Lower Subansiri Districts have been already sanctioned by the Govt. of India through REC and the schemes for remaining districts are yet to be sanctioned by the Govt. of India. However, the Govt. of India conveyed in principle approval for rest of the schemes to go ahead with the tendering process to the State Government. Under RGGVY, the proposed physical targets for Annual Plan 2008-09 are as under:

Un- Electrified (Virgin)
 De- Electrification
 Intensified
 494 Nos.

- Maintenance of Assets: This sector is having committed liabilities towards maintenance of assets involving payment of salaries, operation and maintenance costs of hydel and DG sets, residential and non-residential buildings and vehicles etc. In view of non-availability of non-plan fund, a provision has been kept under plan for the said purpose.
- 3.89. The outlay proposed for Annual Plan 2008-09 for Power (T&D) is Rs. 9408.00 lakh.

## **Arunachal Pradesh Energy Development Agency (APEDA)**

- 3.90 The main objectives of Arunachal Pradesh Energy Development Agency are to promote, implement and disseminate knowledge in the field of renewable energy sources and technologies in the State. The Arunachal Pradesh Energy Development Agency is the odal agency for all the programmes and schemes which are connected with Renewable and Non- Conventional Energy Sources sponsored by the Ministry of New and Renewable Energy (MNRE). APEDA is provided with grants-in-aid by the Govt. of Arunachal Pradesh to meet its expenditure on Direction and Administration, Maintenance of Assets and also to meet the State share of Centrally Sponsored Schemes of IREP and NRSE.
- 3.91 The Arunachal Pradesh Energy Development Agency has made a commendable achievement under SPV programme of MNRE and has won the first prize amongst the Special Categories States of the country based on its performance. Some of the major achievements made by APEDA till date are as under:

Particulars	Achievements
	Model –I = 300 Sets
Solar Home lighting System	Model –II = 1040 Sets
	Model - V = 240 Sets
Solar Lantern	5000 Sets
Solar Street System	183 Sets
SPV Power plant Standalone	9.20 KW
Grid Interactive Power Plant	25 KW
	(a) Hydro: 16 Nos.( 374.80 KW)
Remote Village Electrification Programme	(b) Solar Home System : 186 villages
	(c) Bio-mass Gasifier: 12 villages
Bio-gas Programme	(a) Family Type: 1763 Nos.
Dio-gas i rogramme	(b) Night Soil based: 9 Nos.

## (a) Integrated Rural Energy Programme (I.R.E.P.)

- 3.92 The Centrally Sponsored Scheme of Integrated Rural Energy Programme (I.R.E.P.) aims at meeting the energy requirement in the selected blocks of the State by providing a cost effective and optimal mix of all the energy sources. During 2008-09 emphasis will be given for promoting non-conventional energy devices like Solar Water Heating System, Solar Lantern, SPV Home Light, village electrification through SHS, Grid interactive SPV power plant, Bio-Gas Plant, Water Mill, Biomass Gasifies, setting-up of IREP Cell etc. especially in rural areas of the State. The funds for the various schemes undertaken by the APEDA have been provided both by the Govt. of India as well as the State Govt. Currently, there are 8 IREP Cells at Miao, Tezu, Pasighat, Basar, Daporijo, Doimukh, Seppa and Bomdila functioning in the State.
- 3.93 During Annual Plan 2008-09, focus will on promotion of non-conventional energy devices like Solar Water Heating System, Solar Lantern, SPV Home Light, village

electrification through SHS, Grid interactive SPV power plant, Bio-Gas Plant, Water Mill, Biomass Gasifies, setting-up of IREP Cell etc. especially in rural areas of the State.

3.94 The outlay proposed for Annual Plan is Rs. 153.00 lakh, the schematic break up of which is as under:

(Rs. In lakh) Annual Plan 2008-09 Schemes Proposed outlay 2 Setting up of District Level 7.50 IREP Cell Solar Energy PV Programme 34.99 Bio gas (NBMMP) 30.00 Feasibility survey of hydels 7.00 Direction and Administration 68.51 5.00 Maintenance Total 153.00

3.95 Important physical targets proposed for Annual Plan 2008-09 are: Biogas (NBMMP) - 150 Nos. and Setting up of District Level IREP Cell – 1 No.

## (b) New and Renewable Sources of Energy (NRSE)

- 3.96 With the objective to provide power to the dispersed and scattered villages and hamlets, where conventional power supply through grid is not economically viable, the State Govt. has given due importance to NRSE sector.
- 3.97 For implementation of Centrally Sponsored Scheme of New and Renewable Sources Energy (NRSE) during 2008-09, an amount of Rs. 279.00 lakh has been proposed for meeting the State share and for promoting energy devices and plants etc. The break up of proposed outlay is as under:

	(Rs. in lakh)
	Proposed
Schemes	outlay
	2008-09
Direction & Administration	156.26
Maintenance	30.00
Publicity	0.60
Building	42.00
Solar Energy PV Programme	38.39
Wind Solar Hybrid Programme	10.37
White LED( SHS) Programme	1.38
Total	279.00

## INDUSTRY AND MINERALS

## **Industries & Industrial Training Institute (ITI)**

3.98 Arunachal Pradesh is one of the industrially most backward States in the country. Though the State is endowed with rich natural resources, certain inherent problems like difficult topography, inadequate infrastructure have come in way of exploiting the natural resources in a big way. Local indigenous entrepreneurship class is also yet to be developed. As such, industrial development in Arunachal Pradesh is yet to take-off and is still in nascent stage. The Industrial Policy of the State fails to bring about any positive impact on industrial front. The private investors are shy to invest in the State despite various concessions and incentives. Local entrepreneurship is yet to emerge. There is no major industry in the State. Prior to the restriction of the Hon'ble Supreme Court's imposition in timber operation in 1996, there were a good number of wood based industries. The closure of these industries resulted in a substantial loss of revenue. At present 16 Nos. District Industries Centers (DIC) are operating in the State to provide all service and support facilities to the small and village industries. The DICs are also helping the local entrepreneurs identifying suitable schemes, preparing feasibility reports, arranging supply of tools and equipments, and providing credit facilities etc.

3.99 Under Prime Minister's Rozgar Yojana (PMRY) 200 nos. of unemployed educated youth have been assisted for self employment during 2007-08. The construction of Industrial Growth Centre at Niglok – Ngorlung with an estimated cost of Rs. 10.71 crore is under progress and this will open up private investors to establish industrial units. **The State Industrial Policy 2001** is under revision and new policy is under active consideration of State Govt.

#### **Industrial Training Institute:**

- 3.100 There are five ITIs functioning in the State to meet the technical manpower requirement of the State. These are
  - 1. Industrial Training Institute, Roing, Lower Dibang Valley Distt.
  - 2. Industrial Training Institute, Tabarijo, Upper Subansiri Distt.
  - 3 Industrial Training Institute, Dirang, West Kameng Distt.
  - 4. Women Industrial Training Institute, Yupia, Papum Pare Distt.
  - 5. Industrial Training Institute, Miao, Changlang Distt.
- 3.101 The Department has proposed to introduce training courses in these ITIs by inviting guest lecturer from various financial management institutions for imparting training on availing loan from the financial institutions, up-gradation of existing trades, Mechanic (MV), introduction of new trades on Information and Technology and Electronic System Management, Draftsman (Civil), TV and Radio, Secretarial practice and Electrician, training materials for trainees, up-gradation of Mechanic (Radio and TV) Trade to Information & Technology and Electronic System Maintenance etc. during Annual Plan 2008-09.

#### 3.102 Thrust Areas during Annual Plan 2008-09:

- Establishment of Industrial undertakings in the private and cooperative sectors for sustainable development of the State.
- Investors from outside the state will be encouraged to invest in the state.
- Industries based on locally available raw materials.

3.103 The outlay proposed for Annual Plan 2008-09 under Industries including Industries other than VSI and ITI is Rs. 628.00 lakh which will be utilized as under:

(Rs. in lakh)

20.00 460.00 20.00 35.00 30.00 30.00 150.00
20.00 <b>460.00</b> 20.00 35.00 30.00 35.00
20.00 <b>460.00</b> 20.00 35.00 30.00
20.00 <b>460.00</b> 20.00 35.00
20.00 <b>460.00</b> 20.00
20.00 <b>460.00</b>
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10.00
15.00
5.00
10.00
400.00
400.00
18.00
3.00
15.00
17.00
008-09
nual Plan
osed outlay
1

3.104 Physical targets proposed for 11<sup>th</sup> Five Year Plan, anticipated achievements during 2007-08 and target proposed for Annual Plan 2008-09 are as follows:

Item	Unit	Target 11 <sup>th</sup> Plan	Anti. Achi. during 2007-08	Target Annual Plan 2008-09
1	2	3	4	5
Persons trained under IMT programme	Nos.	1000	200	200
Strengthening of DICs	Nos.	-	16 DICs to continue	2
Registration of SSI units	Nos.	500	100	100
Proposal under IIDC Scheme	Nos.	-	-	2
Marketing, Expo, Summit and Seminar	Nos.	10	2	2

## **Textile and Handicrafts**

3.105 The rich heritage of traditional handloom and handicraft provide scope for employment opportunity to the unemployed youths in different trades. The existing craft centres impart training to the local youths in various trades for self-employment. The Annual Plan 2008-09 envisages providing incentives to the local artisans to improve design and quality product in view of competitive market in the neighbouring States. However, despite the efforts of the government to modernize looms and incentives to the local entrepreneurs and NGOs, the achievement is not at the desired level. It has been the consensus policy of the State to preserve and promote this heritage by encouraging cottage and village industries and setting up of Craft Centres. The basic policy has been to sustain the rich handicrafts and textiles tradition to generate self employment and augmentation of income among rural masses. The existing 88 Nos. Crafts Centers are imparting training to local youths in different trades. There are 15 Nos. Emporia, one each in every district headquarters besides 3 Nos. Emporia, one each at Kolkota, Delhi and Itanagar Central Emporium functioning through which marketing of handloom & handicrafts products are done thereby providing marketing facilities to the local artisans.

3.106 The State Govt. is intended to make a break-through in agro-processing industry in small scale sector, besides increasing the production of traditional handicrafts and handlooms and sericulture in the rural area through modernization and up-gradation of skills. Efforts are on development and exploitation of full potential of handicrafts and handlooms, silk varieties, angura, eri and muga, cane and bamboo furniture etc. Local entrepreneurship would be developed. Self Help and Cooperative Society – based units need to be encouraged.

#### 3.107 Main focus during Annual Plan 2008-09:

- Promotion and development of Export Market for Handloom and Handicraft items of Arunachal Pradesh.
- Maintenance of Market Complex/Emporium at Bhikaji Cama Palace, Baba Kharag Singh Marg New Delhi.
- In-service Training Programme for skilled development of traditional artisan in the State.
- Introduction of modern equipments and machineries in the existing Craft and production centres.
- Distribution of tools & machineries, raw materials on 50% subidy to 1 year/2 year/3 year course passed out trainees of Craft Centres for selfemployment.
- Organising a Market Development under Sericulture sector.
- Establishment of Mini Cold Storage for Seed Production and rearing of 500 acres Mulberry Garden through individual plantation.
- Establishment and development of Rural Industries Centres at different places of Arunachal Pradesh.

3.108 The outlay proposed for Annual Plan 2008-09 is Rs.485.00 lakh, the break up of which is indicated below:

(Rs. in lakh)

	Proposed
Items	Outlay Annual
	Plan 2008-09
1	2
Direction and Administration	315.00
Handloom Industries	80.00
Handicraft Industries	25.00
Sericulture Industries	30.00
Khadi & Village Industries	20.00
Other village Industries	15.00
Total:	485.00

3.109 Important physical targets of Textile and Handicrafts during 11<sup>th</sup> Plan, anticipated achievement during 2007-08 and target for Annual Plan 2008-09 are as follows:

Major/Minor	Unit	Target for	Anticipated	Target
Head of Development		11th Plan	achievement	Annual
		(2007-12)	2007-08	Plan
				2008-09
a) Establishment of Emporium	Nos.	3	-	1
b) Production of Handloom	Meters	10,00,000	1,48,000	1,48,000
Cloths				
c) Employment opportunity	Nos.	35,000	7,000	7,000
including part-time				
d) Production of Mulberry	In Kg	10,000	1,000	1,000
Raw Silk				
e) Production of Eri Cocoons	In Kg.	15,000	8,000	8,000
f) Production of Muga	Nos.	40,00,000	8,00,000	8,00,000
Cocoons				
g) Production of Oak Tassar	Nos.	80,00,000	16,00,000	16,00,000
Cocoon				

## **Trade and Commerce**

- 3.110 The potentials for trade and commerce in Arunachal Pradesh is immense. The strategic location of the State flanked by China, Myanmar and Bhutan is a great advantage for bilateral trade. Global trade is presently the key to development of economy and Arunachal Pradesh can play vital role taking advantage of the access being made available to South East Asia in consonance with India's 'Look East Policy'. The main functions of the department are as under:
  - Issue of trade license.
  - Facilitation of border trade and foreign trade.
  - Development and expansion of export production particularly plantation of crops orchid and flowers, handloom and handicrafts.
  - Creation of infrastructure for export commodities including Export Processing Zones.
- 3.111 It is proposed to provide Rs. 15.00 lakh during Annual Plan 2008-09.

## **Geology and Mining**

3.112 Arunachal Pradesh is rich in mineral resources like coal, petroleum & natural gas, dolomite, limestone, graphite, iron, marble, ferro-silicon, lead, zinc etc. Present sites of proven mineral occurrences in the State are indicated below:

Mineral/Ore/Crude Oil	Location.	Estimated reserves (in million tonnes)
Coal	Namchik – Namphuk	84.23
	1	
Limestone	Tidding	40.00
	Pangin	225.00
	Hunli	13.35
	Menga	0.70
Dolomite	Rupa	143.00
	Kaspi(Jamiri)	11.13
Graphite	Bopi	2.46
	Khetabari	0.50
	Taliha	0.30
Crude Oil & Natural	Kumchai	Commercial
Gas	Diyun	exploitation is going
	Kharsang	on.
Ferro-Silicon	Kalaktang	1.25
Grade Quartzite		
Marble	Tezu	30.30
	Dora	43.30
	Hunli	2.34
	Pyuli	0.18

- 3.113 Given the difficult terrain and absence of infrastructure and communication bottlenecks, Arunachal Pradesh still remains a least explored and exploited area despite having enormous minerals deposit indicated above.
- 3.114 The Geology & Mining department is responsible for geological surveys and investigation, mineral exploration, control and monitoring on production of major and minor minerals and revenue collection in terms of royalty etc. So far 100 Nos. river bed quarries have been notified and approved for extraction of minor minerals throughout the State.
- 3.115 The State Government has granted following RP and PL to the M/S Trident Mineral Resources Pvt. Ltd., Bangalore with prior approval of the Ministry of Mines, Govt. of India:
  - Grant of Reconnaissance Permit for gold, PGE, nickel, copper, lead, zinc, silver, diamond,chromium, molybdenum, tungsten, iron and all associated minerals over an area of 5000 sq.km in East Siang, West Siang and Lower Subansiri districts.
  - Grant of Prospecting License for lead, zinc, silver, copper, gold, cadmium, platinum, palladium and iron over an area of 24 sq.km in Shergoan, Mukatung PL block, West Kameng district.

- 3.116 During 2008-09 it is proposed to start the new South East Coal project in 133.65 hect area of Namchik-Namphuk Coalfield located at Kharsang in Changlang district. The estimated annual production of coal wll be 0.1 million tonne .The mining project will be implemented through the Arunachal Pradesh Mineral Development & Trading Coorporation Limited, Itanagar. The revenue target of the department during 2008-09 is Rs.1500.00 lakh.
- 3.117 The outlay proposed for Annual plan 2008-09 is Rs.250.00 lakh.

## TRANSPORT

## **Civil Aviation**

- 3.118 There are many administrative centres and other areas located in the remote and inaccessible interior areas of Arunachal Pradesh which require immediate connectivity by constructing and maintaining existing helipads and ALGs. Presently, there are 85 helipads, 15 ALGs for transportation of men and materials for operation of Pawan Hans/ Jagson helicopter services and Army sortic services. Since the State is strategically located, the ALGs are mostly used by the defence personnel and, therefore, upkeep and maintenance of the ALGs assume importance.
- 3.119 The Airports Authority of India has selected a site at Karsingsa-Banderdewa in the capital complex for construction of a Greenfield Airport. Techno-Economic Feasibility Study of the site has already been carried out by Airports Authority of India (AAI). The Govt. of India has also considered the proposal of the State Govt. to construct a Greenfield Airport at Tawang, which is one of the most important tourist places of the country. There are 5 nos. non-operational Airports, viz., Pasighat, Tezu, Ziro, Aalo and Daporijo which require immediate repairs and maintenance.
- 3.120 The outlay proposed for during 2008-2009 is Rs.300.00 lakh.
- 3.121 The physical targets proposed for 11<sup>th</sup> Plan and anticipated achievement of 2007-08 and target for Annual Plan 2008-09 are as under:

Item	Unit	Target for 11 <sup>th</sup> Plan	Anti. Ach. 2007-08	Target for Annual Plan 2008-09
Constructions of helipads/ ALGs/Hanger infrastructure	Nos.	20	4	7
Improvement/Extension ALGs/Helipads, Security fencing and side drains, retaining wall, repair of buildings, electrification	Nos.	120	22	16
Maintenance of helipads/ ALGs	Nos.	30	5	9
Construction of buildings, staffs quarters, VIP lounge etc.	Nos.	30	10	9
Maintenance/repairs of safety equipments	Nos.	22	5	2

# Roads & Bridges

3.122 In the absence of other modes of transportation such as air service, railway, inland water transport, road is the only viable means of communication in Arunachal Pradesh. At the dawn of Independence, there were just a few dirt roads, the State is now having a total

road length of 18086.52 Kms. However, with road density of just 21.60 km/100 Sq.km the State has the poorest road infrastructure as compared to the national average of 84 Km and north eastern average of 60 Km. There are three major agencies, namely, BRO, PWD and RWD are involved in road construction in the State.

3.123 Construction of road in Arunachal Pradesh is cost prohibitive and is a challenging task because of its hilly terrain, geological formation, weak and susceptible to erosion and other forms of devastation. The State also forms a part of seismologically active zone which adds to the problem of stability of hill slopes, safety and durability of roads. The rocky formation and steep hills with deep valleys/gorges call for extensive earthwork and more bridges works resulting in a very high cost of construction. Out of 157 administrative centres and 3880 villages, 34 administrative centres and 2741 villages are yet to be connected by road. The State, thus, has still to go a long way in bringing all habitations under road connectivity.

#### 3.124 Thrust Areas during Annual Plan 2008-09:

- Completion of on-going schemes
- Construction of link road to un-connected villages.
- Linking of district HQs with National Highway standard.
- Construction of Trans Arunachal Highway.
- Construction of International Trade Roads to China, Myanmar and Bhutan
- 3.125 The Central Road Fund (CRF) administered by the Ministry of Road Transport and Highways is made available on three categories of roads and bridge projects ,viz., roads of inter state importance, roads of economic importance and roads under normal category projects selected by the State Government or State Programme category. There are 37 Nos. road and bridge schemes implemented under Normal CRF from full funding from the Ministry of Road Transport & Highways. Of these, 17 Nos. schemes have been completed till date and balance 20 nos. schemes are in different stages of completion. Besides Normal CRF, the department is also implementing 2 Nos. road and bridge schemes under Inter-State Connectivity Criteria of CRF funding and another 2 Nos. road schemes under Economic Importance Criteria of CRF funding which entails 50% Central Grant and 50% State Govt. support.
- 3.126 The State Government started availing RIDF loan from NABARD for construction of roads and bridges during the year 1999-2000 i.e. from RIDF-V onwards. In order to complete all on-going projects of RIDF, the State Government has imposed a blanket ban for taking up of new schemes till 31<sup>st</sup> March, 2010. One road scheme, viz. Dirang-Tawang BRO road to Sangti Khali Bok via Khaso (14.50 km) has been completed under RIDF. During 2007-08, a provision of Rs.39.93 crore is kept for availing RIDF loan for completion of 29 nos ongoing projects which are in different stages of execution.. So far NABARD has released 18200.14 lakh to the road & bridge sector since inception. A sum of Rs. 3800.00 lakh is proposed during Annual Plan 2008-09 as RIDF loan.
- 3.127 The National Highway Network in Arunachal Pradesh consists of NH 52, NH 52A and NH 153 having a total road length of 419.52 kms. The National Highways 153 (32.50 km) is being completed as single lane NH. This has been included under SARDP (NE) Phase-"A" and double lane will be started from 2008-09.
- 3.128 The State Govt. has taken up with the Central Ministry for taking up double lane to

all district Hqs. including National Highways 153 (32.50 km) under SARDP (NE) Phase-"A". The total length of the road is 1999.00 km. missing road gap of 1007.00 km has been proposed for taking up under SARDP (NE) Phase—"B".

- 3.129 The Asian Development Bank (ADB) under the aegis of DoNER has sanctioned 1200.00 km of road development project in the North East as Phase-I under the package "North Eastern Sate Road Projects" (ADB TA 4378-IND). The up-gradation of Pasighat-Pangin road (81.00 km) at the cost of Rs. 130.00 crore has been included in this programme.
- 3.130 The outlay proposed for Annual Plan 2008-2009 is Rs.16147.00 lakh, the breakup of which is as under:

(Rs. in lakh)

	(Its: III Italiii)
Item	Amount
Roads	9646.30
Bridges	1078.70
RIDF loan	3800.00
CRF	1622.00
Total:	16147.00

3.131 The physical targets for 11<sup>th</sup> Five Year Plan, anticipated achievement during 2007-08 and targets for Annual Plan 2008-2009 in respect of major components of roads and bridges under PWD are given below:

Item	Unit	Target for	Anti	Target for
		11 <sup>th</sup> Plan	achiv.	Annual Plan
		2007-2012	2007-08	2008-09
1	2	3	4	5
Survey & Investigation	KM	1500.00	380.79	366.50
Earth Work	Km	700.00	41.18	172.17
Protective Works	Meters	20000.00	1,004.00	3,844.00
Pavement(Soiling/	KM	700.00	18.44	20.572
Metalling)				
Carpeting/recarpeting	KM	450.00	36.07	117.46
Pucca Drain	Km	70.000	11.16	50.43
Permanent/Steel/Bailey	No/	2500.00	4/75	21/502.75
Bridges	Meters			

## **Emerging Issues:**

- 3.132 Some of the issues relating to road development in Arunachal Pradesh which require immediate attention of the Govt. of India are:
  - Out of 34 unconnected administrative centres, works on 12 administrative centres are at various stages of execution under BRO, NLCPR, CRF and NABARD. For connectivity to the remaining 22 Nos. centres (1017 km) will require Rs. 1136.00 crore.
  - There is a large number of temporary log bridges/belly bridges/Steel bridges/ watergaps without bridges requiring permanent RCC bridges.

- Conversion of these bridges will facilitate movement of heavy vehicles/equipments where power projects are located. This will also boost development of tourism and exploration of mineral wealth in the State.
- With the creation of new districts, sub-divisions and administrative centres in the State, acute problem of accommodation, both residential and non-residential, has arisen. Further, existing buildings, which were constructed more than 20-30 years ago, now in a dilapidated condition. The State is not in a position to undertake regular repairs/maintenance of these infrastructures.

## **Rural Works Department (Rural Roads)**

- 3.133 The Rural Works Department is assigned with the works related to soil and water conservation, construction of rural link road and bridges under State Plan and implementation Pradhan Mantri Gram Sadak Yojona. The Department also shoulders responsibilities of construction of residential and non-residential buildings of other departments.
- 3.134 In order to establish rural connectivity the department has undertaken construction of 7 nos. bridges under RIDF loan in East Kameng, Papum Pare, Lohit, Lower Dibang Valley, Upper Dibang Valley and Tirap districts with a total project cost of Rs. 1028.26 lakh which is inclusive of State share of Rs. 205.64 lakh. During current year Loan component of Rs. 623.00 lakh and State share of Rs. 134.00 lakh have been released.
- 3.135 In rural areas road connectivity is abysmally poor and inadequate in comparison to the urban areas of the State. Under PMGSY 1502.84 KMs has been constructed benefiting 294 habitations (villages). Further, the Ministry of Rural Development, Govt. of India has sanctioned 94 nos. road of stage II category and 62 nos. new roads of length 838.60 km with estimated cost of Rs. 413.03 crore. The works have been started and completion is expected in scheduled time. On completion of these roads 62 villages of this state will get road connectivity with the main artery. The present connectivity status under PMGSY of the State is as follows:

Description	1000+	500-999	250-499	<250	Total
Total number of habitations	172	266	480	2962	3880
(as per 2001 census)					
Total number of connected	123	139	190	687	1139
habitations					
Total number un-connected	49	127	290	2275	2741
habitations ( Pre-PMGSY)					

## Coverage of Habitations

Description	1000+	500-999	250-499	<250	Total
Habitations covered by PMGSY	5	14	18	38	75
2000-2001 (Phase-I)					
Habitations covered by PMGSY	10	22	52	103	187
2001-2003 (Phase-II)					
Habitations covered by PMGSY	13	18	41	23	95
2004-2005 (Phase-IV)					

Habitations covered by PMGSY	8	27	4	16	55
2005-2006 (Phase-V) Bharat					
Nirman,					
Habitations covered by PMGSY	-	-	4	15	19
2006-2007 (Phase-VI)					
Balance unconnected Habitations	13	46	171	2080	2310

It appears from the above table that 2080 villages having below population of 250 are not eligible under PMGSY.

3.136 The State is having about 76% habitation (<250) which are not qualified under PMGSY. There are many habitations located in far flung difficult terrain still in isolation for want of proper porter track and suspension bridges over many criss-cross streams and rivulets. To connect the sparsely located habitations by all weather roads is very cost intensive and not viable. Therefore, alternate option like bridle path, porter track, suspension bridges will be a better alternative to connect those villages.

## 3.137 Emerging Issues:

#### **PMGSY**

(a) Maintenance responsibility lies with the State Govt. and fund for this is to be met out through its normal annual budgeting, for future sustainability of the road. It is estimated that an amount of Rs. 115.00 crores is required during the 11<sup>th</sup> Plan for routine maintenance of PMGSY road works. Due to limitation of resources in the state plan adequate finance is difficult under this important sector. Therefore to meet up such huge liabilities of committed nature, dedicated maintenance funds need to be earmarked by the Planning Commission every year for PMGSY roads exclusively. Year wise estimated fund requirement for the remaining year of 11<sup>th</sup> Plan is as under:

Year	Requirement of funds for PMGSY in the
	remaining year of 11 <sup>th</sup> Plan
2008-09	Rs. 13.50 Cr.
2009-10	Rs. 22.20 Cr.
2010-11	Rs. 31.24 Cr.
2011-12	Rs. 42.36 Cr.
Total	Rs. 109.30 Cr.

- (b) Under the Pradhan Mantri Gram Sadak Yojana (PMGSY) guidelines, bridges having a span up to 25 mtrs can only be funded under the programme. In case the span exceeds 25 mtrs the pro-rata costs beyond 25 mtrs are to be borne by the State Government. There are a number of road works under PMGSY and Bharat Nirman being proposed under Phase-VII and VIII where the bridges exceeding 25 mtrs span need to be constructed. In the on-going PMGSY projects there are two nos. bridges of span ranging from 45 mtr to 115.00 mtr require state pro-rata cost valued Rs. 10.50 crore. In the impending PH-VII, and PH-VIII proposal also similar situation prevails. Therefore, in the 11<sup>th</sup> Plan estimated amount of Rs. 50.00 crore is required to meet the counterpart share.
- (c) Access to Topo Sheets of the areas adjoining the International Border areas: On the basis of the restriction imposed by the Ministry of Defence, Govt of India,

the Topo sheet of the areas adjoining the International Borders are not available with the Rural Works Department and Public Works Department. This creates difficulties in planning of road network for the un-connected villages located in border areas.

- 3.138 Outlay proposed for Annual Plan 2008-09 is Rs. 1400.00 lakh.
- 3.139 The important physical targets proposed for Annual Plan 2008-09 are as under:

Wire Rope Suspension Bridge - 6 Nos.
 Porter Track - 80 Km
 Steel Bridge - 1 No.
 Earthen road - 80 Km

3.140. The targets proposed for Annual Plan 2008-09 under land reclamation & development and land protection are 5 hectares and 600 hectares respectively.

## **Road Transport**

3.141. The Arunachal Pradesh State Transport Services was first started with two buses from Khonsa to Naharkatia in December'1975. Its fleet strengthen rose from 2 buses to 240 buses which are now operating on 147 routes connecting all the motorable remotest administrative centres of the State even though margin profit of revenue is low and operational cost is high. All districts and sub-divisional headquarters of the State are connected by day/night bus services from Itanagar/Naharlagun .The revenue collected by the department during 2006-07 was Rs.10.31 crore. The department is operating 3 (three) Railways Out Agencies at Aalo, Bomdila, Tawang and installed 4(four) Computerized Passenger Reservation System (Railway Booking) at Itanagar, Pasighat, Tezu and Roing.

3.142. The outlay proposed for 2008-2009 is Rs.810.00 lakh, the schematic break up of is as under:

	(Rs. in lakh)
Item	Amount
Acquisition of fleet	328.00
Workshop facilities/ Machinery and	120.00
equipments	
TRP/ new chamber/TRP generator	100.00
Land & Buildings	72.00
Management and operation	190.00
Total:	810.00

3.143. The important targets proposed during 2008-2009 are as follows:

Sl.	Items	Proposed target
No		2008-09
1.	Acquisition of fleet	25 Nos.
2.	C/o buildings	On-going - 6 Nos.
		New - 21 Nos.

## **Directorate of Transport**

- 3.144. The Directorate of Transport is entrusted with the responsibility to implement the provision of MV Acts and Rules of State / Centre by issuing permits, licences, collection of taxes, use of weigh bridges. Inland water transport, anti-vehicular pollution drive, establishment of District Transport Offices etc. The proposed target collection of revenue for 2008-09 is Rs. 320.00 lakh.
- 3.145. The outlay proposed for this sub-head is Rs.63.00 lakh during Annual Plan 2008-09.

## **Road Safety**

3.146. With the increasing vehicle population, it has become necessary to take up activities on road safety measures and awareness. The department has proposed to implement the schemes such as, observation of road safety week, maintenance of road warning blinkers, procurement of fabricated iron hoarding/sign board/ barricade and maintenance, purchase of traffic equipments, uniforms for traffic police and training programme and publicity etc. The outlay proposed for this sub-head is Rs.14.00 lakh during Annual Plan 2008-09.

## **SCIENCE & TECHNOLOGY**

## **Information Technology & Science and Technology**

- 3.147. The Department of IT & Science & Technology Department has been rendering services using Remote Sensing Information Technology and Science popularization programmes in the State. The department has successfully completed various projects which include the followings:
  - Generation of natural resource atlas of Arunachal Pradesh.
  - Mapping and monitoring of shifting cultivation areas in Upper Siang and Dibang Valley Districts.
  - Soil erosion studies of the State.
  - Documentation of indigenous knowledge system.
  - Mapping and S&T needs.
  - Installation of CICs one in each CD Block providing IT services like Satellite based communications, e-mail and Internet to the local people of the State.
  - Establishment of a Sub-Regional Level Science Centre at Itanagar.
- 3.148. The Department is engaged in some major projects like generation of disaster management information system, land use/land cover mapping of entire State, study of land degradation, mapping and monitoring of snow and glaciers of the State etc. Also, there is a proposal of conducting a study on the flood problems of entire North East India to be submitted to the NEC, Shillong this year. The department is going to take up one hundred micro hydel projects through Department of Science & Technology, GOI for the entire State. Currently, one micro hydel project of 2 X 100 KW using the cross-flow Turbine technology at Kodak Village is being taken up on R & D basis. The Planning Commission has earmarked Additional Central Assistance for the National e-Governance Action Plan (NeGAP). The Department is implementing the scheme as per guideline.
- 3.149. The outlay proposed for the Annual Plan 2008-2009 is Rs.1050.00 lakh.

## **GENERAL ECONOMIC SERVICES**

## (a) Secretariat Economic Services:

3.150. The Planning Department under Secretariat Economic Services is entrusted with multifarious plan activities like formulation and preparation of Five Year Plans, Annual Plans, servicing of State Planning Board, MLALADS, District Level Planning, Border Area Development Programme, Backward Region Grant Fund, horizontal and vertical coordination works related to State / Central Sector programmes such as NEC, Non-Lapsable Central Pool of Resources and MPLADS etc. The department is not in a position to undertake monitoring and evaluation of plan/programmes due to lack of required manpower. The proposed outlay for the Annual Plan 2008-09 is Rs.435.00 lakh. Further, pending formation/ finalization of one time ACA/SPA etc. during 2008-09 and it is proposed to park Rs. 89054.00 lakh, under Planning sub-head.

## (b) District Level Planning:

- 3.151. District Level Planning was introduced in the State from 2001-02. Under this programme, the schemes of both capital and revenue in nature are implemented with the approval of District Planning Committee setup in each district under the Chairmanship of Deputy Commissioner. The broad criteria for formulation of schemes/ projects under this programme are as under:
  - The schemes should not cost more than Rs.10.00 lakh each;
  - The schemes should be confined to the district;
  - There should be no creation of posts;
  - There should be no purchase of vehicle or office equipment.
  - The schemes should not duplicate the effort of the State Plan;
  - The schemes should be initiated and completed in the same year.
- 3.152. Under District Level Planning Rs. 50.00 lakh is allocated to each district as a core allocation uniformly and Rs. 13.33 lakh is distributed to each Assembly Constituency, except Raga Assembly Constituency for which fund is allocated between Upper Subansiri and Lower Subansiri districts. The outlay proposed for Annual Plan 2008-09 is Rs.1600.00 lakh.

# (c) MLA's Local Area Development Scheme

3.153. The programme was introduced in Arunachal Pradesh from 2000-03 in the line of MPLADS. To implement need based schemes at the grass root level as per the recommendations of respective MLA's, the State Government has provided Rs. 50.00 lakh per Assembly Constituency under MLA's Local Area Development Scheme. An amount of Rs.3000.00 lakh has been proposed for Annual Plan 2008-09 which will be distributed uniformly amongst 60 Assembly Constituencies of the State.

## **Tourism**

- 3.154. Arunachal Pradesh has now considered tourism as industry for generation of substantial revenues and employment as the State is a veritable treasure house of natural cultural and adventure tourism, flora and fauna etc. The State has tremendous potential of cultural tourism, advance tourism, wild life tourism and eco-tourism. **The State Tourism Policy 2006** envisages various incentives for development of tourism in the State for employment generation and income and to attract private investment in this sector. However, tourism potential of the State still remains unexplored and unexploited because of resource crunch for creation of infrastructure like tourist lodges, tourist hut, resorts etc. Further, the general backwardness of the area in terms of low road length, absence of rail link and air trips, remoteness of areas and lack of infrastructural development hold the progress of tourism development in check.
- 3.155. The State Govt. organize religious and cultural/tourist festival like Buddha Mahotsava annually in order to encourage national integrity and to showcase the rich and vibrant socio-cultural heritage, the diverse handloom and handicrafts products, indigenous tribal cuisines, the rich and colourful cultural life and tradition with a view to give fillip the development of tourism in the State.
- 3.156. Efforts have been made for development of seven approved Tourist Travel Circuits, namely, (1) Tezpur- Bhalukpong- Bomdila-Tawang, (2) Itanagar-Ziro-Daporijo-Along-Pasighat, (3) Tinsukia-Tezu- Hayulyang, (4) Margarita-Miao-Namdapha, (5) Roing-Mayudia-Anini, (6) Pasighat-Jengging –Yingkiong and (7) Tezpur-Seijusa (Pakhui)-Bhalukpong-Tipi-Tezpur. A greater synergy can be achieved by linking leisure activities such as Golfing, White Water Rafting to these circuits. To facilitate the tourism activities, creation of infrastructure facilities like accommodation, way side amenities, restaurants, resorts, transportation, adventure sports amenities, printed updated information leaflets/booklets, installation of hoardings at prime locations and other basic amenities are required.

#### 3.157. Thrust Areas:

- Identification of existing and potential tourist circuits.
- Estimating the requirements of infrastructure and needed investment funding
- Encourage the community in the identified tourist circuits to develop traditional artifacts, dance troops, folklores and material accurately recalling the stories behind the artifacts.
- Documentation of all festivals and events of the State by involving the department of Art and Culture, particularly, its research wing.
- Develop literature for dissemination of information about the State through guidebooks, first person endorsements, especially celebrities, maps, proper signage systems, brochures, booklets.

## 3.158. Major Development Programmes:

- Tourism Promotion/publicity
- Development of Tourist Infrastructure
- Development of Adventure Tourism

- Construction of building
- Fairs and festivals
- Human Resource Development (Trg. Prog./Seminars/Conference/Awareness)
- Hospitality
- 3.159. The outlay proposed for Annual Plan'2008-09 is Rs.630.00 lakh.

## **Economics and Statistics**

- 3.160. The Directorate of Economics & Statistics collects analyses and publishes statistical data/information relating to economic and social development, conducts surveys for building up data base at different levels and dissemination to cater to planning, administration and research needs. The department is basically a manpower oriented.
- 3.161. The outlay proposed for the Survey & Statistics Department during Annual Plan'2008-09 is Rs. 198.00 lakhs.

## **Food and Civil Supplies**

3.162. The State Govt. is making all out efforts to provide basic essential commodities at an affordable price to the vulnerable section of the society particularly living below poverty line in both rural and urban areas through Public Distribution System and Fair Price Shops. Inspite of these odds, PDS is operating in the state through a network of 1547 FPS (Cooperative 229 nos. + Private 1318 nos.). As sizeable population living in the remote, inaccessible and high altitude areas are yet to be brought under PDS.

#### 3.163. Major Development Programmes:

- Enforcement of various control orders/measures issued by both Central and State Government under the Essential Commodities Act and liaison with FCI, IOC, Railways, Salt Commissioner, Steel Authority of India, IAF and other organizations through Deputy Resident Commissioner posted at Kolkata, Guwahati, Shillong, Tezpur, Lilabari and Mohanbari.
- Timely procurement, transportation, stocking and distribution of various essential commodities including SKO, LPG Cylinder and other Petroleum products through FPS and authorized outlets to meet the requirement of the people. Construction of godown in district / Sub-divisional Head Quarters and in transit places for storages of essential commodities also one of the prime objectives of the departments.
- The department is implementing Centrally Sponsored Scheme viz; Annapurna Yojana to benefit the destitute and old age people above 65 years and not covered under NOAPS. Under the scheme, every identified beneficiary is entitled to get 10 kg of Rice free of cost.
- 3.164. The proposed outlay for 2008-09 is Rs.217.00 lakh. It is targeted to open 50 numbers FPS during 2008-09.

## **Legal Metrology and Consumer Affairs**

3.165. The Department of Legal Metrology enforces 12 nos. Acts as enacted by the Centre and the State Govt. from time to time, such as Standard of Weights and Measures, 1976, Standard of Weights Enforcement Act,1985 and Arunachal Pradesh State Consumer Protection Rules, 1987 etc. to protect the interests of the consumers. It implements consumer protection programmes and ensures accuracy in weights and measures by verification and stamping. The proposed outlay of the department for 2008-09 is Rs.75.00 lakh.

## **Small Savings**

3.166. Small Savings is one of the important sources for mobilization of State's own resources. The anticipated Gross and Net savings collection during 2007-08 are around Rs.60.00 crore (Gross) and Rs.50.00 crore (Net) respectively. The collection targets for 2008-09 is Rs.60.00 crore (Gross) and Rs.40.00 crore (Net). The outlay proposed for Annual Plan 2008-09 is Rs. 19.00 lakh.

## **SOCIAL SERVICES**

## **School Education**

- 3.167. The State Government in the last successive plan periods has given high priority to Education sector and considered it as the main force for propelling socio-economic development. In literacy rate the State achieved a significant progress from 41.59% in 1991 to 54.34% in 2001 (Male - 64.07%, Female - 44.24%). The State is implementing the SSA programme in mission mode to attain the objective of Universalization of elementary education in the age group of 6-14 years. However, Universalization of Elementary Education is yet to be achieved despite lunching of SSA programme in the State, because inadequate provisions of infrastructure facilities like construction of school and hostel thinly building, teachers' quarters and non-coverage of small populated villages/habitations.
- 3.168. High drop-out rate in the elementary and secondary stages is a cause of grave concern. It is pertinent to note that high drop out rate especially among girls is another barrier for UEE. Various steps are now being taken under Sarva Shiksha Abhiyan with community involvement to reduce the rate of drop-out. The main reasons of high drop-out may be attributed to poverty, early marriage, engagement of children in house-hold works, illiteracy of parents particularly in remote areas, inadequate physical infrastructural facilities in schools and hostels in rural areas and difficult topography which are at times too difficult to negotiate for physical access. To reduce the dropout rate the state government has provided incentives like stipend, book grants etc.

## 3.169. Broad objectives during Annual Plan'2008-2009:

- Universalisation of Elementary Education by 2010.
- Universalization of Secondary education under SSA Phase-II and Education for All.
- Removal of illiteracy.
- Encouragement of girls' education.
- Providing better physical facilities and improvement of school education.
- Qualitative improvement of education.
- Encouragement of professional education.
- Providing better physical facilities and improvement of School Education.
- Encouragement of professional education to the world of works for productive and self employment.
- To provide cooked Mid-Day –Meal (MDM) to Children to enhance enrolment, retentions and reduction of drop out rate in the schools.
- Provision of special schools for physically and mental challenged children.
- 3.170. So far 19 Nos. of Kasturba Gandhi Balika Vidyalaya have been opened for providing quality education to rural girl children for streamline to formal school through bridge courses. Girls' education has been given emphasis under National Programme on Education for Girls at Elementary Level to remove the gender disparities. The scheme has been made operational in eleven blocks of different locations of the State.
- 3.171. The State Government has taken major initiative under 'Sarva Shiksha Abhiyan' since 2000-2001 to provide education for children population of age group 6 to 14 years to achieve the goal of UEE through a time bound integrated approach. The implementation of SSA has resulted in significant increase in the number of children completing elementary

education. Under this programme, schemes like opening of new primary school, upgradation of primary to middle school, repairs & maintenance of school building, drinking water facilities and construction of additional class room are taken up. Detailed achievements made under SSA since its inception are given below:

(a) Growth in enrolment (Goal-I)

Level	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Primary	105725	131655	165749	165749	164494	189755
Middle	48401	58740	64113	64133	73215	70886
Elementary	154126	190395	229862	229882	237709	260641

- 44% increase of enrolment at primary level.
- 32% increase of enrolment at Upper Primary level
- 41% increase of enrolment at Elementary Primary level

(b) Reduction of drop-out of school children (Goal-II)

( - )		I			,		
Particulars	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Total No.	74213	58104	57419	56400	46664	38079	30565
of dropout							
of school							
children							
% drop-	48%	31%	25%	25%	20%	15%	9.65%
out							

At the beginning of SSA nearly half of the 6-14 age group children were out of school. This has been brought down to 15%. In absolute percentage point there is a decrease of 34%. Thus, enrolment has been increased by 26 %.

#### (c) School infrastructure

(in nos)

	(111 1108.)
Primary school building	347
Upper primary school building	244
Residential school building	115
Additional class room	1158
Drinking opwater facilities	1849
Toilet for boys and girls	526
Repairing and maintenance	7069
ECCE centre	1561
Computer aided learning	105
Primary school opened	452
Upper primary school opened	307
Residential school opened	92
NPEGEL centre opened	20
KGBV School opened	19
EGS to primary school	128
Upgradation of primary to Upper primary	68
school	

An amount of Rs. 1300.00 lakh is proposed as State share for SSA during Annual Plan'2008-09.

3.172. **Opening/ Up gradation of Schools /Introduction of Science and Commerce Stream:** Considering the huge enrolment of students in the schools after elementary and secondary levels, up gradation of Middle to Secondary and Secondary to Higher Secondary Schools have became urgent need of the hour. To inculcate the feeling of scientific temperament among the students, the introduction of science/commerce stream at +2 stages are to be considered as per the demand of the public from different corners of the State. The target for the up gradation, introduction of science/commerce stream during Annual Plan 2008-09 as under:

Sl No.	Schemes	Annual Plan 2008-09
1.	Up gradation of Middle to Sec. school.	05 nos.
2.	Up gradation of Secondary to Hr. Sec. School	05 nos.
3.	Introduction of Science stream	03 nos.
4.	Introduction of commerce stream	02 nos.
	Total:	15 nos.

- 3.173. The **ICT Programme** is a Centrally Sponsored Scheme launched in the State during 2005-06 to provider computers to Secondary School and Hr, Secondary School with the aim of providing ICT skills to the children through computer education. In the first phase 77 Secondary and Hr Secondary School of the State have been covered and another 77 Secondary School & Hr. Secondary School are to be taken up in the second phase. The State share of Rs. 50.00 lakh has been proposed for this programme during 2008-09.
- 3.174. **Post Literacy Programme (PLP)** is a Centrally Sponsored Scheme to provide functional literacy to non-literates to make them take part in the development process, skill development and income generating activities of the nei literate who successfully come out from the Total Literacy Campaign, drop out of TLC etc. For implementation of PLP programme in 10 districts, State share of Rs.15.00 lakh has been proposed during Annual Plan 2008-09.
- 3.175. **Mid-Day Meal** scheme is a Centrally Sponsored Scheme under National Programme of Nutritional support to Primary Education (NP- NSPE) which has been implemented in all Govt. and Govt. aided schools for the children of classes I-V and VI VIII stage of 38 Educationally Backward Block(EBB). All steps are being taken for construction of kitchen sheds for cooked meal programme in the school. An amount of Rs. 100.00 lakh has been proposed during Annual Plan 2008-09.
- 3.176. The outlay proposed for the School Education Department during 2008-09 is Rs. 14504.00 lakh. Details of breakup of allocation are as under:

Sl.	Item	Amount
No.		(Rs. in lakh)
1.	Elementary Education	8423.00
2.	Secondary Education	3874.00
3.	Adult Education	252.00
4.	Sports, Games, and Physical	359.00
	Education	
5.	Direction and Administration	131.00

6.	State shares for MDM prog.	100.00
7.	State share for SSA	1300.00
8.	State share for ICT	50.00
9.	State share for PLP	15.00
	Total:	14504 .00

3.177. The physical targets proposed for 11<sup>th</sup> Plan and anticipated achievement of 2007-08 and target proposed for Annual Plan 2008-09 are as under:

Particulars	Unit	Target for	Anti.	Target
		Eleventh	Achiv.	2008-
		Plan	during	09
		(2007-12)	2007-08	
Upgradation of Middle to Sec.	No.	25	9	5
School.				
Upgradation of Sec. to Hr. School	No.	15	5	5
Introduction of Commerce Stream	No.	10	4	2
Introduction of Science Stream	No.	10	3	3

3.178. Enrolment target for 11<sup>th</sup> Five Year Plan, Anticipated achievement of 2007-08 and target proposed for Annual Plan'2008-09 are indicated below:

		Target	Anti.	Target
		Eleventh	Achiv.	2008-09
		Plan	during	
		(2007-12)	2007-08	
a)	Primary Stage (I-V)	230000	205000	209000
	Boys	126000	$\overline{111000}$	113000
	Girls	104000	94000	96000
b)	Middle Stage (VI-VII)	<u>78000</u>	<u>68500</u>	<u>75500</u>
	Boys	44000	37500	38500
	Girls	34000	31000	37000
c)	Secondary Stage(IX-X)	<u>36000</u>	<u>33500</u>	<u>34500</u>
	Boys	21300	18500	19000
	Girls	14700	15000	15500
d)	Hr Secy. Stage(XI-XII)	<u>17000</u>	16000	<u>16300</u>
	Boys	10200	9500	9700
	Girls	6800	6500	6600

# **Higher and Technical Education**

3.179. Arunachal Pradesh is lagging behind in the field of higher education in comparison with the country and the North-Eastern region. Non-availability of proper infrastructural facilities in the colleges due to shortage of fund is the main problem for achieving the goal of higher education. The Directorate of Higher & Tech. Education supports and maintains and oversee the establishment and maintenance of collegiate education consists of eight Govt Colleges. Due to paucity of funds even the basic minimum infrastructure viz., academic buildings, lecture halls, hostels, residential buildings, water supply, road, sports facilities and health care etc. are yet to be developed. The lone university in the State has been converted into a Central University from April'2007.

- 3.180. There is a dearth of technical institute in the state. The World Bank funded project of Rajiv Gandhi Polytechnic, Itanagar, has taken over by the State Govt with effect from July'2007. This institute provides diploma in Information Technology, Travel Tourism & Hotel Management., Costume Design & Garment Technology, Herbal Remedies & Cosmetology, Automobile Engineering and Electrical & Electronics. During Annual Plan'2008-09, the on-going schemes of Coaching Centre at Dera Natung College, Itanagar for students appearing for Central and State Civil Services and other professional examination and stipend to students studying in colleges and University both inside and outside the State as well as other vocational training courses will continue.
- 3.181. Due to resource crunch, the State Government is not in a position to establish more new Govt. colleges. To meet the demand of Higher Education, the State Government has decided to encourage establishment of private institutions of higher learning by voluntary NGOs. The State Government has already approved 6 (six) private colleges, namely, Don Bosco College at Jully, St. Claret College at Ziro, Doying Gumin College at Pasighat, North Eastern Homeopathic College at Itanagar, St. Francis De- Sales College at Aalo and St Thomas Institute of Legal Studies Itanagar. Hills College of Education has started B Ed. Course from 2006-07. A project proposal for Rs.25.00 crore for establishment of Engineering College has also been prepared by Anna University to meet the requirement of technical education in the State.

3.182. The outlay proposed for the Higher Education & Technical Education during 2008-09 is Rs. 1550.00 lakhs. Details of breakup of proposed allocation are as under (Rs. in lakh)

Heads of Development	Amount
1. JNC Pasighat	37.24
2. DNGC Itanagar	105.90
3. IGGC Tezu	100.56
4. GC Bomdila	146.52
5. DPGC Kamki	152.81
6. RFGC Changlang	83.74
7. Tirap College, Deomali	75.09
8. Govt College, Yachuli	200.86
9. Directorate Estt.	99.33
10. J.E.E.	9.50
11. Stipend	500.00
12. NSS (State Share)	4.20
13. NCC	0.50
14. Rajiv Gandhi Polytechnic	12.00
15. Career –Guidance and Voc Edn.	0.75
16. State Council for Technical Education	10.00
17. Apprenticeship training	1.00
18. Educational Satellite	10.00
Total:	1550.00

## **Sports and Youth Affairs**

- 3.183. Recognizing the latent potential of tribal youths as well as keeping in view the importance of physical education, games, sports for heath and physical fitness of youths of Arunachal Pradesh, the Department of Sports and Youth Affairs have given due stress on infrastructure development, establishment of sports schools, creation and development of standard play fields, procurement of sports and games equipments for registered clubs/institutions/ associations for taking up adventurous sports, development of indigenous sports, conducting of rural sports and also for providing incentive to sports organizations, talented sports persons, sports management and organization, participation in regional, national and inter-national level sports activities etc.
- 3.184. Although some infrastructure facilities have come up in recent years, the existing facilities are much below the desired level. The lone Sangay Lhaden Sports Academy set up at Itanagar is imparting various training courses. There is an urgent need to gear up sports activities like rural sports, school sports at various level, adventure activities, various youth programmes, participation in regional, national and inter-national level sports activities etc.
- 3.185. The outlay proposed for Annual Plan 2008-09 is Rs. 414.00 lakhs.

#### Research

- 3.186. Arunachal Pradesh is known for its historical and archeological sites. Therefore, it has been the responsibility of the Research Department to preserve and protect the indigenous tribal culture through publication of booklets depicting the socio-cultural and religious aspects, participation in book exhibitions, book fairs, seminar and workshop, maintenance of archaeological sites like Malinithan, Pursuramkund, Itafort, Naksaparvat and Chidu-Chimri etc. and archives activities like collection and documentation of historical and cultural importance of local tribes and sub-tribes. The Jawaharlal Nehru State Museum at Itanagar and other district museums are also maintained by the department. The department is also carrying out archeological exploration and excavation within the State. The Programme of National Mission for Manuscripts has been launched recently in the State. The State archives have been re-organized in a scientific manner. Documentation on various aspects of cultural life and linguistic pattern of the tribes of Arunachal Pradesh are being carrying out. Project like documentation of healing system of the Tai-Khamptis is in hand. Further, the department has proposed to develop all archeological sites of the State to attract the tourists.
- 3.187. The outlay proposed is Rs. 275.00 lakh for Annual Plan 2008-2009.

## **Art and Culture**

- 3.188. For promotion, preservation and development of age old indigenous faith and cultural heritage of various local tribal groups, folk lore and folk songs, culture and history of the people etc, the department of Art and Culture is the nodal department of the State. The on-going programmes/ activities like financial assistance to cultural societies, assistance for construction and maintenance of community halls, cultural halls, prayer halls, organization of State level folk dance, folk songs, melas, festivals, pro-rata contribution towards corpus fund to NEZCC, Dimapur etc. will also continue in the year 2008-2009.
- 3.189. The proposed outlay for Annual Plan 2008-2009 is Rs. 180.00 lakh.

## **Public Libraries**

- 3.190. To fulfill and meet the educational, intellectual, cultural and informational needs of general public, the Department of Public Libraries has got 84 libraries in the districts & sub-divisional Hqrs. The Government is extending library services providing reading materials and other infrastructural facilities to undertake research, documentation and propagation of traditional ethos and culture through the institutes of libraries.
- 3.191. The outlay proposed for Annual Plan 2008-09 is Rs. 127.00 lakh which will be utilized as under:

(Rs. in lakh)

1	Direction & Administration	90.00
2.	Assistance to Raja Rammohan Roy Foundation, Kolkota.	10.00
3.	Transport	8.00
4.	Library furniture & fixture	5.00
5.	Maintenance of library buildings i/c Minor works.	10.00
6.	Binding of reading materials	1.00
7.	Preservation of reading materials	1.00
8.	Library requisite	1.50
9.	Furnishing of libraries	0.50
	Total :-	127.00

## **Health and Family Welfare**

- 3.192. Ever since Arunachal Pradesh embarked on planned economic development, improvement in the health status of the population has been one of the major thrust areas for the social development. However, access to quality health services of the population at large still poses a Herculean task being faced by the State. Even today, after more than five decades of economic planning, the situation is not very different particularly in the remote and inaccessible areas of Arunachal Pradesh. The State compares poorly with the rest of India and its neighboring States with respect to most health indicators. Rendering of health services in the State has been proved to be a formidable task and challenge in the context of low density of population, widely scattered small habitations, altitudinal and climatic variations found within short distances and difficult slopes required to be negotiated in many areas. The basic health care and reproductive and child health (RCH) services are yet to be reached to the interior and remote areas of the State. Universal accessibility to health and family welfare services by entire population of the State is still a distant dream. Therefore, necessary emphasis has been given to maximize the existing infrastructure and capacity along with completion of the ongoing schemes. Primary health care infrastructure, including construction of institutional and residential quarters need special attention, particularly in the rural and fur-flung border areas.
- 3.193. Notwithstanding such enormity of the problem of physical accessibility, the sustained efforts made over the last successive plan periods, the Department of Health & Family Welfare with its institutional network extends health care facilities through 03 nos. General Hospitals, 14 nos. District Hospitals, 43 nos. Community Health Centre, 108 nos. Primary Health Centre, 557 nos. Sub-Centres, 37 nos. Homeopathy Dispensary, 3 nos. Ayurvedic Dispensary etc.

- 3.194. Major achievements made under **National Rural Health Mission (NRHM)** till date is indicated below:
  - (a) **NRHM & RCH-II:** Under NRHM, Arunachal Pradesh State Health Mission and State Health Society (SHM/SHS) has achieved following activities
    - **DHM/DHS:** The District Health Mission/ District Health Society has been constituted, notified and registered in all districts.
    - R.K.S. (Rogi Kalyan Samiti): Rogi Kalyan Samiti has been constituted, notified and registered in 13 district hospitals 29 CHCs and 71 PHCs in the State. Accordingly, accounts books have been opened in all above DHs, CHCs and PHCs and out of 378 Sub-Centres, 245 Sub-Centres have already been opened joint account books.
    - Village Health & Sanitation Committee (VHSC): 2065 VHSC in the state have been constituted and notified.
    - **Janani Sonroka Yujona (JSY):** Under JSY the poor pregnant women in the rural population are illegible beneficiaries. By the year 2006 to December'2007, 2669 pregnant women were benefited under this programme.
    - **Drug Kits:** Drug kits supplied by Govt. of India have been supplied to the district during year' 2006-07.
    - Health Mela Organisation: During the Year 2006 & 2007, 11 Health Mela were organized at Lumla (Tawang), Seppa (East Kameng), Koloriang (Kurung Kumey), Ruksin (East Siang), Namsai (Lohit) and Yingkiong (Upper Siang) during the financial year 2006-07 and Namsai (Lohit), Longding (Tirap), Thrizino (West Kameng), Bameng (East Kameng) and Jairampur (Changlang) during the year 2007-08. Thousand of patients were benefited.
    - **Ambulances:** Under NRHM, 4 ambulances have been supplied to the district for Mukto PHC in Tawang, Dirang CHC in West Kameng, Darak PHC in West Siang and Diyun PHC in Changlang. Under RCH-II 4 more ambulances were supplied to 4 PHCs run by NGOs under PPP, which was implemented by VHAI.
    - **ASHA:** Out of targeted 3862, 3094 ASHAs have been already selected in the state so far. Again out of 2861, 1569 ASHAs have been already trained. All necessary equipment like ASHA kits, ASHA dairies, ASHA Box etc. have already been supplied to them.
    - **Sub- Centre** (**Functionalisation**): Out of 378 Sub- Centres, 273 Sub-Centres are made functional in the State. However, efforts are being made to functionalize all sub-centres by providing ANMs. 138 additional ANMs have been recruited under NRHM and posted at different sub-centres of the district in state. Construction of building for 10 nos. sub-centres is going on.
    - **PHC:** At present 52 nos. of PHCs are functional in the State.
    - Recruitment of Medical Officer:
      - (i) Allopathy 10 nos. and posted to the districts.
      - (ii) AYUSH 10 nos. and posted to the districts.
    - Civil works:
      - (i) 20 nos. of residential quarters are under constructions.
      - (ii) Construction of Labour Room, RCH Store, and Immunization Room at different districts are in progress.
      - (iii) Minor civil works like improvement of water and electric supply, repair and maintenance works are in progress under RCH-II.

- **Upgradation of General Hospital/ District Hospital:** 14 nos. of General Hospitals/ District Hospitals are being improved in the form of civil works and supply of equipment/instruments. District Hospital Aalo was upgraded as FRU last year by providing specialists and staff nurses.
- **Public Private Partnership (PPP):** All 16 PHCs run by NGO under PPP in the state are providing excellent primary health care services to the rural needy population.
- Mobile Medical unit (MMU): 32 Units of MMU I & II have already been flagged off by HCM and placed to the districts. 3 units of MMU-III have been already been received and will be flagged off soon for placement in the district.
- Other Activities: Besides above normal Immunization Week, Routine immunization sessions, outreach immunization sessions etc. are being carried throughout the state.
- (b) State Health Education Bureau (SHEB): The activities of SHEB like prevention of diseases and restoration of positive health through health check-up, promotion of desired sanitation at various places and distribution of health education materials to the students and teachers have been appreciable during 2007-08.

#### (c) AYUSH

- Ayush Dispensaries in the State till 2007 are 51 nos. of which 43 nos. are of Homeopathy and 8 nos. are of Ayurveda.
- 29 nos. homeopathy specialty clinics are going to be implemented at different districts of the state for which Rs. 10.00 lake each has been received from Ayush department, GOI during financial year 2006-07 and implementation process is going on.
- 8 units of Ayurvedic Indoor facility (Ayurvedic Wing) at different district hospitals are going to be implemented in the state for which the department of Ayush, Govt. of A.P. has received sanction of Rs. 35.00 lakh during the year 2006-07, form Ayush Department GOI. The implementation process is going on
- Govt. of Arunachal Pradesh has already earmarked land for establishment of North East Institute (NEI) Folk Medicines sponsored by GOI.
- (d) **National Leprosy Eradication Programme** (**NLEP**): The outcome of NLEP activities in the state is excellent. The Goal of NLEP by the end of 2005 was 1 Leprosy case/ 10,000 populations. Now the prevalence rate of Leprosy in our state is 0.43/10,000 Population

During Annual Plan 2008-09, a sum of Rs. 544.00 lakh has been proposed as State share towards NRHM.

3.195. National programmes like Family Welfare, TB, Malaria, Control of blindness, Leprosy Eradication Programme and AIDS control programme will also continue to be implemented with financial assistance from the Govt. of India during 2008-09. The Arunachal Pradesh State AIDS Control Society has set up Voluntarily Counseling and Testing Centers (VCTC) at General Hospitals at Naharlagun and Pasighat and District Hospital at Bomdila and Tezu..

#### 3.196. Thrust Areas:

- Consolidation of PHCs, CHCs and General Hospitals etc., control of communicable and non-communicable diseases, improvement of family welfare measures.
- Maximizing benefits from the existing infrastructure and capacity along with completion of the ongoing schemes.

- Emphasis on Primary health care infrastructure, including construction of institutional and residential quarters, particularly in the rural areas.
- There is a wide gap between the sanctioned health facilities and health manpower to operate the facilities. Therefore, making basic healthcare and reproductive and child health services accessible and affordable to the rural population will be the one of the thrust areas.
- Emphasis on National programmes like Family Welfare, TB, Malaria, control of blindness, leprosy eradication programme and AIDS control programme will also continue to be implemented with financial assistance from the Govt. of India.
- Operationalization of the Arunachal Pradesh State AIDS Control Society and Voluntarily Counseling and Testing Centers (VCTC) at General Hospitals at Naharlagun and Pasighat and District Hospital at Bomdila and Tezu

#### 3.197. Major Development Programmes

- Primary Health Care
- Secondary Health Care
- Territory Health Care
- Super Speciality Services
- Medical Education
- Training
- ISM & Homeopathy
- ESI
- Control of Communicable diseases
- Control of Non-Communicable diseases
- State Plan Support to National Health Programme
- T.B. Control Programme

# 3.198. The outlay proposed for Annual Plan 2008-09 is Rs. 2500.00 lakh. The schematic breakup is as under:

(Rs. in lakh)

	(Tto: III Tuiti)
Head of Development	Proposed
	Outlay
	2008-09
Primary Health Care	800.00
Secondary Health Care	590.00
Territory Health Care	25.00
Medical Education	49.00
Training	29.00
ISM & Homeopathy	110.00
Other Programmes	
(a) Integrated Disease Surveillance Prog.	2.00
(b) Drug Control Prog.	14.00
(c) Prevention of Food Adulteration Prog.	15.00
(e) Mass Education on Elementary Health care	15.00
&Hygiene/Integrated health care/IEC through	
camp approach etc.	
(f) Pulse Polio Immunization Prog.	2.00

(h) Drug de-addiction Prog.	5.00
(i) Blood Banks	15.00
(j) Epidemiological Investigation Prog.	15.00
(k) Direction & Administration	142.00
(l) Nursing service	3.00
(m) Grants-in-aid to NGOs	170.00
(n) High Altitude Dai Prog.	9.00
(o) Medical Relief to Indigenous tribal patients.	5.00
(p) Dental and Oral health care	30.00
(q) Estt. of new health care facilities in the	200.00
districts.	
Control of	
a) Communicable diseases	200.00
b) Non-Communicable diseases	55.00
Total	2500.00

3.199. Physical targets for 11<sup>th</sup> Plan, targets and anticipated achievements of 2007-08 and targets proposed for Annual Plan 2008-09 are as under:

Items	Unit	Eleventh Plan	Annual Plan 2007-08		Target 2008-
		Target	Target	Anti. Achivt.	09
1	2	3	4	5	6
Sub-Center	No.	150	30	30	30
Primary Health Center	No.	50	10	10	10
Community Health Center	No.	50	10	10	10
a) Homeo Dispensary	No.	10	2	2	2
b) Ayurvedic Dispensary	No.	10	2	2	2

# Water Supply and Sanitation

- 3.200. As per latest status survey the State has 5612 nos. habitations, out of which only 1359 habitations have fully provided with drinking water facilities. However, there are large number of villages and administrative centres which are still to be covered under water supply scheme. The existing water supply system which were installed during '60s and 70s are quite inadequate to cater to the present needs. Therefore, it is necessary to augment the ageing system with filtration treatment. Considering the degree of deficiency in the existing water supply systems particularly in urban areas in view of growth of population, efforts are needed to increase per capita per day availability of water. Under Total Sanitation Campaign construction of low cost pour flash latrine has taken up.
- 3.201. Discontinuation of PMGY from 2005-06 has affected the completion of 170 ongoing schemes with an estimated cost of Rs. 3663.68 lakh. These schemes are at various stages of completion.
- 3.202. The department is maintaining drinking water supply schemes in 5594 (1359 FC + 2183 PC + 2052 Slipped Back Habitations ) and 24 numbers of urban centres besides execution of schemes in 5 NC habitations, 265 Nos of PC habitations and implementing

975 augmentation works in various habitations where water supply availability is below the prescribed levels under MNP and ARWSP. Augmentation & improvement of water supply in declared 21 urban centers has posed a serious problem due to lack of resources. Similarly, filtration and treatment facilities could not be extended to most of the schemes due to poor funding.

- 3.203. The major impediments in implementation of ARWSP under Bharat Nirman Programme is the State's inability to provide required quantum of State share .To achieve the targets envisaged under Bharat Nirman, an approximately **Rs. 1070.42 crore** will be required in the next two years i.e., 2007-08 to 2008-09 out of which 50% is State share.
- 3.204. Due to inadequate Operation & Maintenance fund, many of the water supply systems remain unattended and become non functional. The major problem faced in maintenance of existing water supply schemes during rainy season is that because of flash floods and land slides, the distribution system and intake points get badly damaged, even sometimes entire systems are washed away. Due to inaccessibility, immediate restoration of the system becomes difficult. Thus, the system remains unattended and ultimately becomes defunct which is one of the main reasons for re-emergence of NC/PC from FC habitations:
- 3.205. Under Total Sanitation Campaign (TSC), due emphasis has been given for creating awareness amongst the rural population about benefit of use of low cost sanitary latrines.

#### 3.206. Thrust Areas during Annual Plan 2008-09

- Provision of drinking water to every settlement/habitation.
- Measures for rapid expansion and improvement of sanitation facilities in urban and rural areas of the State through Central and State investments, such as ARWSP.
- Strengthening of operation and maintenance system and involvement of people's participation on capital cost sharing and operation & maintenance of rural water supply.
- Construction of low cost latrine under TSC.

#### 3.207. Major Development Programmes:

- Coverage of Rural Habitations Under State Plan Under ARWSP
- Individual house hold latrine
- Urban Water Supply
- 3.208. The outlay proposed for Annual Plan 2008-09 under Water Supply and Sanitation is Rs.4900.00 lakh.

3.209. Physical targets for 11<sup>th</sup> Plan, anticipated achievement of 2007-08 and target proposed for 2008-09 are as under:

Items	Unit	Eleventh Plan	Annual Plan 2007-08		Target 2008-09
Items	Oiiit	Target	Target	Anti. Achi.	1 arget 2000-07
1	2	3	4	5	6
1. RWS	Hab.	NC-1035	Cap'99 NC-5	Cap'99 NC-5	Impv. Work- 06
	in no.	PC-1091	Cap'99 PC-5	Cap'99 PC-5	SB NC- 06
		Insttn- 552	SB NC- 84	SB NC- 84	SB PC- 09
			SB PC – 64	SB PC – 64	
			ANST- 122	ANST- 122	
2. Rural	No.	IIHL-112352	IIHL-25713	IIHL-25713	IIHL-23500
Sanitation		San Com-331	San Com-1588	San Com-1588	San Com-1523
		SS-3404	SS-952	SS-952	SS-832
		BE-1784	BE-14	BE-14	BE-14
		RSM/PC-38	RSM/PC-38		
3. Urban	MLD	8.1	8.04	8.04	2.06
Water					
Supply					

#### **Emerging issue:**

3.210. Under the rural water supply component of Bharat Nirman Programme, potable water has to be provided to all uncovered habitations and also address slipped back and water quality affected habitations. Under Accelerated Rural Water Supply Programme, funds are released by Rajiv Gandhi National Drinking Water Mission on 50: 50 basis for coverage of partially covered (PC) and not covered (NC) habitations with matching provision made under the State sector by the State Govt. To achieve the target of rural water supply under Bharat Nirman Programme, Rs. 150 crores as state share is needed every year for the next three years over and above the average sectoral allocation. This is beyond the capacity of resources of the State

# Housing

- 3.211. The housing activities in Arunachal Pradesh are implemented under two programmes viz., General Housing and Police Housing. With the rapid growth of the Govt. employment in the tertiary sector, providing accommodation to the employees in the urban and remote administrative centres has posed a problem to the State Government. In fact, construction of Govt. accommodation has not kept pace with the growth of Govt. employees. The situation is aggravated in view of creation of new districts, sub-divisions and circle head quarters. For the financial year 2008-09 a total target of 453 nos. residential units have been proposed.
- 3.212. Similarly, there is also a pressing need for large number of housing units for Police personnel particularly in the districts. With a view to provide proper residential accommodation at State Hqrs., District Hqrs. and interior outposts, it is targeted to take up 39 Nos. residential/non-residential buildings during 2008-09.

3.213. The outlay proposed during Annual Plan'2008-09 is Rs.2985.00 lakh, the breakup of which is given below: -

		(Rs. in lakh)
a) General Housing		2394.00
b) Police Housing		591.00
	Total :-	2985.00

# **Urban Development & Housing**

- 3.214. Effective implementation of urban development plan/programme is essential for Arunachal Pradesh as the existing urban areas have only rudimentary infrastructure to meet the growing demands. There are 28 urban towns in the State.
- 3.215. The Arunachal Pradesh Urban and country planning bill have been approved by State Govt. on 18<sup>th</sup> December 2007. With the commencement of this Bill, special attention shall be accorded on perspective plan for development and growth of towns. Further, the Arunachal Pradesh Municipality Bill has also been got approved on 18<sup>th</sup> December'2007. This bill will ensure delegation of power to Urban Local Bodies involving grass roots level individual in formation of Govt. policies. Low cost houses for Safai Karamcharies and people living below poverty line consisting of 60 dwelling units have been constructed at Itanagar.

#### 3.216. Thrust Areas during Annual Plan 2008-09:

- Channelize urbanization in a systematic planned manner and preparation of comprehensive Urban Development Plan,
- Implementation of Urban Sanitation Programme for maintaining hygiene in urban areas.
- Creation of basic urban infrastructure like footpath, passenger waiting shed, parking places, and
- Control measures for protection of towns from natural calamities like landslide, erosion and beautification of towns.

## 3.217. Major programme during 2008-09:

#### **State Plan**

- 1. **Urban Sanitation:** In order to maintain hygienic living conditions of urban towns, various sanitation measures are to be taken up like construction of landfill site/dumping ground, dustbins, slaughter houses, urinals/toilets, and other equipment & machinery including inspection vehicles/sanitation dumper trucks. Due to scarcity of fund, day to day collection of garbage and its disposal in 17 (seventeen) census towns, 6(six) notified urban areas by the state Govt. and 3 (three) Dist. Head Quarters is not running smoothly. There are requirement of sanitation truck for 12 (twelve) towns for effective collection and disposal of garbage, due to less allocation of fund, proposal for management of existing man power of machineries amounting to Rs. 300.00 lakh only have been proposed during Annual Plan 2008-09.
- 2. **Basic Urban Infrastructure:** Arunachal Pradesh have huge stress on available civic amenities and infrastructures due to rapid increase in population. Therefore, in order to improve the quality of urban life and

infrastructure like footpaths, passenger waiting sheds/bus terminals, public urinals/toilets, dumping ground, burial and cremation ground, road improvement, prevention of landslide, beatification & landscaping, parking places, sewerage and drainage etc. are need to be given priority. As the urban centers are the engine of economic growth of the country, emphasize on proper growth of the towns is required for development of the State and the Country. All most all the towns have inadequate to support the minimum requirement of its needs inhabitants. Therefore, every attempt made to develop adequate infrastructure with the available resources in phase manner in all urban centres.

#### **Centrally Sponsored Schemes**

- 1. **Swarna Jayanti Shahari Rojgar Yojana (SJSRY):** The basic objective of this scheme is to eradicate urban poverty by engaging the urban poor in self employment ventures and wage earning. As per Govt. o India guidelines, the sharing pattern of funding between centre and state is 75:25. Therefore, State Govt. has to contribute 25% of the annual outlay under this scheme as matching state share to utilize the fund granted by the G.O.I. fully. The Ministry of Housing & Urban Poverty Alleviation, Govt. of India has released Rs. 46.68 lakh and Rs. 74.32 lakh during the year 2006-07 & 2007-08 respectively totaling to Rs. 121.00 lakh. A provision of Rs. 41.00 lakh has been proposed for Annual Plan 2008-09.
- 2. Integrated Development of Small and Medium Towns (IDSMT): This scheme is basically aimed for creation of infrastructure for small and medium towns in the country so that migration of some population directly from rural areas to state capital/ mega cities are arrested mid-way in the small and medium towns. The funding pattern of the scheme is 48:32:20 (Central Share: State Share: Financial Iinstitute). Under this scheme, the department has covered 16 (sixteen) towns till Tenth Plan Period. Out of which, 12(twelve) are spilled over/ ongoing schemes (namely Seppa, Tezu, Changlang, Roing, Yupia, Ziro, Pasighat, Daporijo, Along, Basar, Khonsa and Deomali.). A sum of Rs. 389.24 lakh is proposed under this sub-head.
- 3. **10%Lumpsum provision for the benefit of North Eastern Region including Sikkim:** The Ministry of Urban Development/ Housing and Urban Poverty Alleviation, Govt. of India has sanctioned 29 Nos. of projects upto 2007-08 at estimated cost of Rs. 12223.80 lakh and released Rs. 6721.00 lakh as its share. Out of which the matching state share against two schemes namely improvement and upgradation of road network, Tawang and infrastructure development at Tawang amounting Rs. 70.55 lakh have been allocated during 2007-08. A provision of Rs. 600.00 lakh is kept for the purpose during 2008-09.
- 4. Valmiki Ambedkar Malin Basti Awas Yojana (VAMBAY): The Ministry of Housing and Urban Poverty Alleviation, Govt. of India has sanction Rs. 548.85 lakh and released its share of Rs. 272.925 lakh for construction / upgradation of 1213 Nos. of dwelling units at Pasighat, Aalo, Basar, Itanagar, Koloriang, Bomdila, Changlang, Roing and Ziro during 2005-06.

- 5. **Jawaharlal Nehru National Urban Renewal Mission:** In order to keep and fulfill the aspiration of slum dwellers, focus attention of the integrated infrastructure development, creation of assets and management of urban infrastructure, delivery of civic amenities and provision of utilities with emphasis on universal access to urban poor etc. are required to be given priority. During Annual Plan 2008-09 an outlay of Rs.242.00 lakh is proposed
- 3.218. The outlay proposed for the Annual Plan'2008-09 is Rs. 1732.00 lakh. The schematic break up is as under:

(Rs. in lakh)

Heads of Development	Amount
Establishment cost & State Plan schemes including setting up of	588.00
Municipal/ULB Establishment	
Solid Waste Management/ Sanitation Programme	300.00
JNNURM/UIDSSMT/IHSDP	242.00
Matching State share against 10% Lump-sum provision for NER	602.00
funded by Govt. of India	
Total:	1732.00

3.219. The physical targets proposed for 11<sup>th</sup> Plan, anticipated achievement of 2007-08 and target for Annual Plan 2008-09 are as under:

Item	Unit	Target for 11 <sup>th</sup> Plan	Anticipated achievement 2007-08	Target for Annual Plan 2008-09
1. Drainage	Km.	57	17	4
2. Footpath	Km.	73.70		8
3. Dumping ground	Nos.	5		1
4. Solid Waste Management	Town	28		1
5. Cremation ground	No.	5	2	2

#### **Emerging Issue:**

3.220 The indicated allocation received under JNNURM, UIDSSMT and IHSDP for the mission period (2005-2012) based on population criteria needs to be review. The allocation should be based on geographical consideration and actual requirement on ground as assessed in the CDP. Further, proposed linking of budget provision of JNNURM with NLCPR will not favour resource crunch state like Arunachal Pradesh.

# **Town Planning**

3.221 The Department of Town Planning has been entrusted to prepare the Developmental Plan, Zonal Plan, Transportation Plan etc to regulate the growth of urban Centre including administrative head quarters in a systematic manner. To regulate the growth of 28 numbers notified urban centres in a systematic manner, the department has also been assigned to prepare Town Country Planning Act. Further, the Department of Town Planning has been notified as the nodal department for implementation of National

Urban Information System (NUIS) scheme. Under this scheme, the Ministry of Urban Development selected Aalo and Daporijo for Urban Mapping and Itanagar Capital Region under utility mapping.

## 3.222. The focus during Annual Plan 2008-09:

- Planning of town development all over the State.
- Regulation of planning of building construction as per Town Map/Master Plan
- Preparation of Regional Plans, Developmental Plan and Town Planning.
- Assistance/ advice to Municipalities for preparation of Town Planning.
- Preparation of Land Use Plan
- 3.223 The outlay proposed for Annual Plan 2008-09 is Rs. 120.00 lakh.

## **Information and Publicity**

3.224. Although the Information and Publicity Department is playing a pivotal role in publicizing the developmental programmes and socio economic legislations of the Central/State Governments through films, exhibitions, publications, audio-visual cassettes, seminars, symposia and intensive publicity campaigns, etc., many of the existing media tools and equipments available with the State's Department of Information and publicity are found to be obsolete and require immediate replacement in order to disseminate the plan, policy and programme of State Government amongst the people so that a climate of awareness is generated for successful implementation of various developmental schemes

## 3.225 The thrust areas during Annual Plan 2008-09:

• Continuation of on-going schemes like Photo Service, Visual Publicity, Printed Publicity, Audio Visual publicity and Press Publicity etc.

3.226. The outlay proposed under this head during Annual Plan 2008-09 is Rs. 218.00 lakh.

# **Labour and Employment**

3.227 The Department of Labour and Employment is responsible for enforcement of various labour laws like "Minimum Wages Act", "Workmen Compensation Act" and "Trade Union Act" etc and providing labour welfare to the working class in Arunachal Pradesh by way of statutory and non-statutory welfare measures. The department is also responsible for ensuring and maintaining harmonious relation between workers and employers through its industrial relation mechanism At present, there is no separate department of Employment in Arunachal Pradesh to handle employment services. A wing of Labour Department looks after this activity. In addition, management of Employment Exchanges for catering various services such as vocational guidance, Carrier Counseling both at State and District levels are also the thrust areas of Labour Department. It is proposed to modernize the Employment Exchanges through computerization to tackle the emerging educated employment problem in the State.

3.228 The proposed outlay for Annual Plan 2008-09 is Rs. 135.00 lakh, which will be utilized as under:

(Rs. in lakh)

		Tto: III Tuitii)
Heads of development	-	Amount
a) Labour Welfare		90.00
b) Employment Exchange		45.00
	Total	135.00

## Social Welfare, Women and Child Development

3.229 The Department of Social Welfare, Women and Child Development execute both schemes under State Plan as well as Centrally Sponsored Schemes for the welfare, rehabilitation and other disadvantaged who require special attention of the State Government. Necessary steps are being taken for formulation and implementation of Women Component Plan (WCP) and Gender Budgeting.

#### 3.230 Major programmes during 2008-09:

## **State Plan**

- Programmes for State Old Age Pension
- Welfare of destitute people in the society,
- Construction of Juvenile home,
- Relief & Rehabilitation for Persons with Disability,
- Programmes for the welfare of women and children,
- Financial Assistance to Arunachal Pradesh Social Welfare Advisory Board (APSWAB)

#### **Centrally Sponsored Schemes**

- Special Nutrition Programme,
- Implementation of Article 275(1) of the Constitution.
- National Social Assistance Programme.
- National Programme for Adolescent Girls.
- ICDS/ Swayamsidha/ Kishori Shakti Yojana etc.

3.231 The outlay proposed for the Annual Plan 2008-2009 is Rs. 1810.00 lakh, the break up of which is indicated below:

(Rs. in lakh)

Heads of Development	Amount
1. Direction & Administration	205.00
2. State Old Age pension	24.00
3. National Social assistance Programme	700.00
4. Relief and rehabilitation of persons with disabilities	10.00
5. Assistance to APSWAB	20.00
6. Maintenance of inmates Juvenile Justice Home	3.00
7. Awareness and Publicity	2.00
8. Welfare of children in need of care and protection	6.00
9. Women Welfare Programme	2.00
10.Inter Tribal Marriage	2.00
11.State Programme for Rehabilitation of Persons with	65.00

disabilities(SPRPD)	
12.C/O Office building for DD(I) and CDPOs	90.00
13.Construction of Juvenile Justice home	3.00
14.Article 275(1) of Constitutions	220.00
15.Addl Central Assistance to Pregnant & Nursing	8.00
mothers and adolescent girls	
Sub Total :-	1360.00
16.Special Nutrition Programme	450.00
Grand Total:	1810.00

3.232 The physical targets proposed for 11<sup>th</sup> Plan, anticipated achievement of 2007-08 and targets proposed for Annual Plan 2008-09 are as under:

Sl.	Item	Unit	Target for	Anti achiv	Target for
No.			Eleventh	for Annual	Annual
			Plan	Plan (2007-	Plan
			(2007-12)	08)	(2008-09)
1	2	3	4	5	7
1.	Old age Pension	Persons	8000	1333	1333
	_	(Cum)			
2.	Resettlement of handicapped	-do-	100	100	100
3.	Assistance to APSWAB	Centers	1	1	1
4.	Welfare of children in need	Nos.	3000	500	500
	of care & protection.				
5.	Construction of Juvenile	Nos.	5	1	1
	Home				
6.	Women Welfare Programme	Nos.	200	40	10
7.	National Social Assistance				
	Programme				
	a) NOAP	Nos.	72000	14500	14500
	b) NFBS	(cum)	4000	1100	1100
8.	Nutrition	Nos.			
	Children	(cum)	197881	168256	168256
	Mother		45047	52363	52363
9.	Anganwadi Centres	Nos.	4277	4277	4277
		(Cum)			

## 3.233 Emerging Issues:

• There is glaring urban and rural disparity in nutritional status in the State. Failure of providing adequate State matching share has resulted in nutritional deprivations amongst women and children, perpetuating the vicious cycle of mal-nourishment, especially amongst children, pregnant and lactating women of rural areas and thereby justice has been denied to them. In view of resource constraint, the plan/programme under ICDS projects have been jeopardized. Due to problem of accessibility and lack of infrastructure, the coverage of Anganwadi Centres and Special Nutrition Programme are yet to reach the targeted groups in the remote and far-flung areas of the State.

## **GENERAL SERVICES**

## **Stationery and Printing**

3.234 Printing Process of the State Government like Budget documents, speeches, vouchers, bulletins, Gazettes etc. are undertaken at the Government press located at Naharlagun. Since the Directorate of Information, Public Relations & Printing is a service department of the State Government, it becomes imperative to develop the lone printing press and to equip it with modern machineries /technologies for undertaking large and voluminous works of the Government, apart from upkeep and maintenance of existing machineries. During 2008-09 the department has proposed to continue ongoing schemes like procurement of films, chemicals, plates, maintenance of plant & machinery, development of digitized setting training etc.

3.235 Outlay proposed for Annual Plan 2008-09 is Rs. 153.00 lakh.

## **Public Works**

- 3.236. Consequent upon creation of new districts, expansion of departments and establishment of new administrative centers, there has been growing demands for construction of various non-residential buildings such as Circuit House, Inspection Bungalows and other buildings of public utility. Such works are taken up under Public Works Department.
- 3.237. The outlay proposed for Annual Plan'2008-09 is Rs. 2007.00 lakh.

# **Infrastructure for Judiciary**

- 3.238. Under the Centrally Sponsored Scheme of Infrastructure for Judiciary, infrastructural support and facilities for strengthening of judiciary is undertaken on 50:50 sharing basis by Centre and the State for constructing court buildings at districts and construction of Bar rooms for lawyers etc.
- 3.239 During 2008-2009 an amount of Rs. 50.00 lakh as State's share has been proposed for the following schemes.
  - 1<sup>st</sup> phase construction of District Court building at Hawai in Anjaw district.
  - 1<sup>st</sup> phase construction of District Court building in Kurung Kumey district at Koloriang.
  - 1<sup>st</sup> phase construction of District Court building at Anini in Dibang Valley district.
  - Renovation of 2 (two) Nos. Judge bungalows of High Court Judges at Naharlagun.

# **Administrative Training Institute**

3.240 The Administrative Training Institute is an upcoming institute which is yet to develop necessary infrastructural facilities similar to that of other developed training institutes in the North Eastern States. At present the institute is imparting both induction and in-service training to various categories of Government officials both at State level and district levels to increase the efficiency and to maintain higher standard of proficiency in

the functioning of Government departments. Some issue based programmes like Financial rules, office procedures, plan formulation and decentralized planning process to Zilla Parishad members, foundational training for newly inducted APCS officers/ministerial staff etc are taken up by the institute. The Govt. of Arunachal Pradesh in recognition of the rule of training institute has drawn up a long term plan for upgradation and development of Administrative Training Institute for human resource development and capacity. Therefore, there is a need for modernization and upgradation of the institute to achieve its short term and long term goals.

3.241 It is proposed to conduct 17 Nos. training programmes under the sponsorship of the Department of Personnel & Training, Govt. of India, New Delhi and another 3(three) Nos. of training programmes under State Plan during 2008-09. The outlay proposed for Annual Plan 2008-09 is Rs. 50.00 lakh.