



सत्यमेव जयते

GOVERNMENT OF ASSAM

**AN APPROACH TO 12TH FIVE YEAR PLAN
(2012 - 2017)**

**PLANNING AND DEVELOPMENT DEPARTMENT
DISPUR : ASSAM**

AN APPROACH TO THE 12TH FIVE YEAR PLAN

1. OBJECTIVES AND CHALLENGES

The Economy of Assam on the eve of the Twelfth Five Year Plan is in a better position than ever before. The growth rate of economy has shown a continuously increasing trend over the years of the Tenth Five Year Plan. Assam has recorded average 5.3 percent growth during the 10th plan period against national average of 7.8 percent. The annual average growth rate of GSDP in Assam during the first three years of the 11th Plan period has shown 6.1 percent whereas the country has grown at the rate of growth of 8 percent. On year to year basis, rate of growth of the state's economy has remained lower than the national rate since 2000-01. Notwithstanding, the gap between the rates of growth of state and the country has shown a steady decline as per Planning Commission's latest estimates released in June, 2011, the rate of growth of the state economy has been placed at impressive 8.08 percent for the fiscal year 2009-10.

Although the economic growth of the State has shown an encouraging trend yet substantial part of the population is deprived of getting the benefit of growth. The part of the population specially living in rural areas, far flung char (Riverine) areas, areas inhabited by scheduled tribes, scheduled caste population, people living in hill areas have not yet received the benefit of safe drinking water, sanitation, basic health care and education etc.

1.1 A VISION FOR 12TH PLAN

The vision for the XII Plan will be creation of a vibrant and resurgent Assam. The acceleration that has been achieved in the economy during the 11th Five Year Plan period will have to be continued in the Twelfth Plan. Only rapid growth will enable the State to wipe out the backlog in the growth and to catch up the growth rate of national economy. Policy of comprehensive and effective development will be adopted to further reduce the poverty and economic inequality in the State.

The main thrust areas during the 12th five Year Plan will be Improvement and up gradation of rural economy which encompasses agriculture and allied sectors, small and medium industries, handloom and cottage industries, removal of imbalances rural vs. urban. Human resource development through up gradation of educational infrastructure for primary and secondary education, development of infrastructure for technical and higher education etc. Strengthening of health care facilities, sanitation, drinking water, nutrition and social welfare. Welfare and development of Scheduled Tribes, Scheduled Castes, Other Backward Classes, Tea Tribes and Minorities. Development of skill and creation of employment opportunities and envisaging on partnership with private sector to tap their resources and technology in the areas of communication, power, transport, and industry.

The strategy will lay emphasis on sectors like handloom, sericulture and tourism where Assam traditionally enjoys comparative advantage and where there is enough

scope of employment and income generation. The strengths and potentialities in these sectors have to be properly harnessed and to develop the products for higher value addition for the world market. It can open new avenues for our traditional weavers and craftsman.

1.2 STRENGTH OF THE ECONOMY

The state economy (GSDP at 1999-2000 constant price) has been growing at an annual growth rate of 5.08% during the last ten years. During the Tenth Plan period from 2002-07 the average annual growth rate of Gross State Domestic Product (GSDP) at constant (1999-2000) prices was 5.33% in real terms. The Planning Commission proposed GSDP growth rate of 6% for Assam as against national GDP growth rate of 9% during the Eleventh Five Year Plan period (2007-12). Against this target stipulated by the Planning Commission, Assam has been able to register GSDP growth rate of 6% at constant price and 10.46% at current price during 2007-08 and GSDP growth rate of 6.16% at constant price and 10.68% at current price during the financial year 2008-09. As per advance estimate, the GSDP of Assam for 2009-10 is Rs 56702 crore at constant price (1999-2000) and Rs 88023 crore at current prices with growth rate of 6.35% and 11.03% respectively. The Net State Domestic Product (NSDP) of Assam during 2008-09 was Rs 48262 crore and Rs 71164 crore at constant (1999-2000) prices respectively. The NSDP growth rate of the State economy in real terms was 6.12% over the previous year. As per advance estimate the NSDP growth is expected to attain 6.30% during 2009-10. The per Capita NSDP of Assam at constant (1999-2000) prices and at current prices stood at Rs 16272 and Rs 23993 respectively during 2008-09. As per advance estimates for 2009-10 the same are expected to increase to Rs 17080 at constant (1999-2000) prices and Rs 26242 at current prices.

The Wholesale Price Index (WPI) based on the prices of agriculture commodities grown in Assam shows that the annual average WPI (base 1993-94=100) increased by 8.33 percent during 2008-09 over the previous year. A substantial increase of 11.52% was also noticed during the first seven months of 2009-10 i.e. from April 2009 to October 2009 over the corresponding period of 2008-09. The annual average of Consumer Price Index (CPI) for working class population of Assam with base 2001=100 displayed an increase of 7.2 per cent in 2008-09 over 2007 and 6.8 per cent in 2007 over 2006.

The state finances have also staged a remarkable recovery during the last few years. The Government of Assam has been able to achieve the fiscal target laid down in the Assam Fiscal Responsibility and Budget Management (AFRBM) Act, 2005. During the last five financial years the State Government has been able to achieve both revenue and fiscal surpluses. This achievement in fiscal performance has enabled the State Government to become eligible for debt waiver to the tune of Rs 105 crore every year since 2005-06 under Government of India Debt Consolidation and Relief Facility (DCRF) Scheme. The Thirteenth Finance Commission has also awarded an amount of Rs 300 crore to Assam as performance incentive grant in recognition of our sound financial management. The Twelfth Finance Commission prescribed 15% as limit for interest payment as a ratio of revenue receipt. Our interest payment expenditure has come down to 8.81% of revenue receipt. Our Debt

burden was 27.95% of GSDP at the end of 2008-09. The per capita Debt of Assam as on 31-03-2009 was Rs 7461. This is the second lowest in the country. The outstanding Government guarantees against loans of various state level PSUs have come down from Rs 1583 crore at the end of 2000-01 to Rs 795.87 crore at the end of 2008-09.

The Thirteenth Finance Commission has recommended a total transfer of Rs 57832.70 crore during the five year period from 2010-15. This is 72.98 per cent of GSDP at current prices in 2008-09. Under the award of the Thirteenth Finance Commission, Assam will receive Rs 52620.60 crore as its share of Central Taxes. Assam's inter se share in Central Taxes has gone up to 3.628% under Thirteenth Finance Commission award as compared to 3.235% and 3.285% recommended by the 12th and 13th Finance Commission respectively. The Thirteenth Finance Commission has awarded a total grant amount of Rs 5212.10 crore which includes Rs 1892.80 crore for Local Bodies. The Thirteenth Finance Commission has earmarked Central Share of Rs 1311.76 crore for contribution to State Disaster Relief Fund, which has replaced present Calamity Relief Fund. The ratio of Central Share and State Share in the State Disaster Relief Fund has been changed from 75:25 at present to 90:10. In addition to that the Commission has recommended Rs 600 crore as Grant-in-aid for State Specific Needs of Assam.

The State Government has been providing computers and necessary accessories with related training to all DDOs of the State Government Departments. All DDOs will be connected online with their controlling officers, Treasuries and Finance Department very shortly. This will increase the speed, efficiency, transparency and accountability in the financial management system to a great extent.

1.3 ECONOMIC GROWTH POTENTIAL IN 12th PLAN PERIOD

The growth rate of GSDP in the state during the 9th plan period was 1.51 percent which increased to 5.33 percent during the 10th plan period. Due to special emphasis given by the govt. in all spheres of development, the state is able to achieve an annual average growth rate of 6.8 percent during the first four years of the 11th plan period and is expecting an annual average growth rate of 7.18 percent in the economy at the end of the 11th five year plan. In the backdrop of the multiplier effects and the present acceleration trend it is hoped that a growth of around 9.08 percent would be achieved during the 12th plan period. Further, during the 9th plan period, Agriculture sector displayed a negative growth rate which has been steadily increasing in the 10th and 11th plan period. The proposed national target of 4 percent in Agriculture during the 11th plan has already been achieved in the 1st four years of the 11th plan and the expected annual average growth rate is 4.9 percent in the sector which is expected to be 4.52 percent in the 12th plan period. The annual average growth rate in the Industry sector which was 2.43 percent in the 11th plan period is anticipated to grow up by 4.35 percent in the 12th plan period. The growth rate in the emerging Service sector is expected to be 11.99 percent in the 12th plan period which was 10.08 percent in the 11th plan period.

The trend of growth from 9th five year plan onwards is shown in the following Tables:

Growth Trend in State Economy

Table -1

Sector	*9 th plan (1997-02)	*10 th plan (2002-07)	**11 th plan period (First four years)				11 th plan- First 4 years Average (2007-11)	Expected Average Total 11 th Plan (2007-12)
			2007-08	2008-09	2009-10	2010-11		
Average Annual Growth Rate in GSDP	1.51	5.33	4.82	6.82	8.08	7.38	6.8	7.13
Average Sectoral Growth Rate								
Agriculture	(-) 1.7	0.63	2.8	6.33	4.21	6.13	4.9	4.58
Industry	4.02	7.9	0.6	3.27	2.47	1.89	2.1	2.43
Services	3.41	7.2	7.79	8.65	12.25	10.05	9.7	10.08

*Base year 1999-2000

** Base year 2004-05

Table-2

Anticipated growth for 12th Plan period

Items	10 th plan	11 th plan	12 th Plan (anticipated)					Anticipated average 12 th Plan
	2002-03 to 2006-07	2007-08 to 2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	
1.GSDP growth rate	5.33	7.13	8.15	8.57	9.05	9.57	10.05	9.08
2.Agriculture	0.63	4.58	4.54	4.47	4.58	4.48	4.52	4.52
3. Industry	7.9	2.43	3.90	4.06	4.25	4.58	4.95	4.35
4.Services	7.2	10.08	10.97	11.48	11.98	12.55	12.98	11.99

Table-3
National and State Indicators

Item	10 th Plan		11 th Plan	
	Assam	India	Assam (Avg. Of first 4 yrs)	India (Avg. Of 3 yrs)
GSDP (Growth rate)	5.33	8.74	6.8	6.95
Agriculture	0.63	4.50	4.9	0.70
Industry	7.9	9.82	2.1	5.99
Services	7.2	9.86	9.7	9.24

1.3 Problems and prospects of the economy

Although the overall growth rate of the state economy has sharply increased during the last ten years over 8th and 9th plan period, still a lot has to be done for boosting the socio-economic development of the state. Mainly the labour productivity is low in our state. The labour force has to be used to the optimum level with increased productivity in the coming days. Further, the Industry sector-particularly the manufacturing sector has been lagging behind in comparison to advanced states of the country. Industry needs some innovations and in this regard the Small scale & cottage industries and Food Processing industries could play a vital role.

The Primary sector namely- Agriculture (crops), Animal Husbandry & Veterinary, Fishing and Forestry sector which provide raw materials to the Industry are also required for further development.

The major challenges are in the Power sector, Roads, Railways and Civil Aviation of the state economy. Marketing facilities in the rural areas are still in bad shape.)

In view of the above, it is therefore felt that quantum of investment, set-up of infrastructure and improvement of labour force productivity are the required objectives of our economic policies in the near future.

1.5 Poverty Scenario in the State

The most elementary but common test of inclusive growth is whether or not economic growth is capable of reducing poverty in general. Evidently, economic growth can reduce poverty only when it is broad based i.e. when income of the poor grows along with the economic growth. If income of the poor does not grow or grows at a relatively slower

rate than the non-poor, growth, in general, misses the goal of inclusiveness and results in all pervasive inequality.

Poverty Rates in Assam (1972-2004)

Year	Assam		India	
	Rural	Urban	Rural	Urban
1972-73	52.7	36.9	56.4	49.0
1977-78	59.8	32.7	53.1	45.2
1983-84	42.6	21.7	45.7	40.8
1987-88	39.4	9.9	39.1	38.2
1993-94	45.0	7.7	37.3	32.4
1999-00	40.2	7.5	27.1	23.6
2004-05	22.3	3.3	28.3	25.7

Source: NSSO, Various Rounds

The poverty rates in Assam (1972-2004) will indicate that both rural and urban poverty in the state, over the years, have shown a steady decline. However, the sharp decline in the poverty rates during 1999-00 to 2004-05 in the state has generated a strong sense of disbelief and the Tendulkar Committee re-estimated the poverty rates at 34.4 percent for the year 2004-05. Based on 66th round of NSSO, the planning commission makes an advanced estimate that the poverty rate in the state as 39.2 percent in 2009-10, which is, manifestly, higher than the earlier estimate of 2004-05.

Notwithstanding, decomposition analysis of poverty ratio further highlight some significant parameters. Apart from the fact that rural poverty is about seven times higher than the urban poverty, the analysis also suggests that incidence of poverty is higher amongst the marginalised communities. For instance, analyses for 1999-00 and 2004-05 data show that poverty rates among the Schedules Castes, both in rural and urban, are more in the state. In 1999-00 rural poverty amongst SC was 44.98 against total rural poverty of 40.2. In 2004-05, the same has been reduced to 27.7 and 22.3 respectively.

The second conspicuous parameters are the geographical divide in incidence of poverty. Based on the 61st round of NSSO consumer expenditure data (2004-05), it could be obtained that rural poverty rates are the higher in the districts of Dhubri (42.4) and Karimganj (40.9). Based on the estimated district level poverty rates (rural) one can delineate clear regional divides in incidences of poverty in the state as shown below.

Regional Variations in Rural Poverty

Region	Poverty Rate
Hills District	16.3
Barak Valley	27.9
Brahmaputra Valley	

Upper Assam	12.4
Lower Assam	30.5
Assam All	22.3

Estimated from 61st Round NSSO, 2004-05

These poverty estimates are based on NSSO's various rounds of surveys of household consumption expenditure. One can, therefore, use average monthly per-capita consumption expenditure (MPCE) as a proxy of growth of income and reduction in poverty. A look at the data on mean MPCE over the years, both rural and urban, would reveal an upward trend. This indicates that declining poverty in the state is consistent with the improvements in the average level of income and, consequently, the consumption expenditure. Difference between the average MPCE of rural and urban is evident from the The 3.6 worrying aspect being almost unchanged level of divide between rural and urban. levels of mean MPCE during 1999-00 to 2004-05. The ratio of rural to urban was 0.49 in 1990- 2000. The ratio has been 0.50 in 2004- 05. The other striking cleavage appears in mean levels of MPCE among the marginalised groups of population in the state. For instance, ratio of mean MPCE of SC to the total in rural areas has been found as 0.94 in 2004-05 which was 0.97 in 1999-2000. In urban areas the ratio for ST is found to be 0.78 and that of SC is 0.76. These underline the necessity to augment levels of income of the marginalized sections of the society in order to make the growth truly pro-poor and inclusive

Besides, studies also reveal that average MPCE growth of the bottom classes in rural areas is marginally higher than the top classes indicating the tendency towards inclusive feature of the present economic growth .Contrarily, in urban areas trend is just reverse. This emphasises the need for expanding inclusive policies in urban areas. However, one requires adjusting for other factors like inflation before coming to such conclusions.

The NSSO also releases data on the direct measure of inequality viz. Gini coefficient of the consumption expenditure. Data reveal that inequality in the state, both in rural and urban areas, has remained lower than the national level throughout. However, it has shown some tendency to increase in the recent past. 3.9 The disaggregated NSSO data of 61st round (2004-05) for the state further reveal that inequality within the state is higher for those districts where poverty rate is relatively low. For instance, inequality (rural) is the highest in Sibsagar (0.258) and that of urban in Dibrugarh (0.437). This points to twin problems of poverty and inequality in the state and, more importantly, their trade-offs.

Inequality Consumption Expenditure

Year	Rural		Urban	
	Assam	India	Assam	India
1972-73	0.180	0.302	0.267	0.341
1977-78	0.179	0.337	0.324	0.345
1983-84	0.192	0.298	0.276	0.330
1987-88	0.222	0.291	0.337	0.352
1993-94	0.176	0.281	0.287	0.340

1999-00	0.200	0.260	0.310	0.343
2004-05	0.197	0.297	0.314	0.373

Source: Various Round NSSO

It is also worth mentioning in this context that just as there are inter-state inequalities in GSDP and per capita GSDP in the country, there prevails intra-state inequality too with regard to Gross District Domestic Product (GDDP) and the per capita district income. The estimated Gini coefficient for GSDP (2009-10) has indicated marginal increase in the level of interstate inequality over 2007-08. Whereas, the Gini coefficient, estimated for GDDP (2008-09) in Assam, suggests increasing inter district inequality over 2003-04.

It has become evident that although the rate of growth has accelerated in the state of late, the growth is yet to be pro-poor in several aspects and it is marked by distinct divides and inequalities, which need to be bridged effectively if it is to become inclusive in true sense of the term.

It, therefore, has become evident from the above that although the rate of growth has accelerated in the state of late, the growth is yet to be pro-poor in several aspects and it is marked by distinct divides and inequalities, which need to be bridged effectively if it is to become inclusive in true sense of the term.

The disaggregated study on poverty also reveals that poverty shows definite bias towards casual daily labourer households, agricultural labourer households, particularly of asset poor households. The poverty is acute amongst households where these specific categories exist. Therefore, poverty reduction strategy must focus on these sections of population.

The evident is that the intra-state inequality is not only confined to the growth of Gross Domestic Product, per capita thereof or consumption expenditure alone. The social indicators too are marked by differences across regions – rural and urban, gender, castes and communities.

The State Government is keen that a definite study on the incidence and nature of poverty be enumerated in a comprehensive study which would incorporate study on development parameters. For the same support from Govt. Of India need to extended.

1.6 VIEWS ON IDENTIFIED STRATEGIES CHALLENGES

I. Enhancing capacity of growth: Keeping in mind the National Growth target of 9.5% during the 12th Five Year Plan our state is also confident that 9 to 10 % growth of the economy is achievable. Serious efforts need to be made to raise the internal resources. Assam is rich in domestic resources, like forest resources & natural resources. There are diversified varieties of flora and fauna. But the advanced utilization process of such

resources has not yet started. Infrastructure development in most of the sectors like surface transport, agriculture, irrigation, water resources, power, education, veterinary, health, tourism etc need more improvement. Power, health, tourism, agriculture etc have huge scope for infrastructure development under P-P-P mode.

More emphasis would be given on the development of social services, diversification of agriculture, forest and environment conservation and infrastructure development including roads and transport to improve the quality of life of rural areas including hill districts riverine areas etc...

II. Enhancing skills and faster generation of employment: It is needless to say that the 11th five year plan aimed at large generation of employment avenues and 12th five year plan also may proceed with higher spirit to open up vista for more employment opportunities for rural people in particular in all possible fields for earning better livelihood and attaining ardent life-style as per demands of time.

This may be possible through the following ways:

- i. Education, preferably technical, should be imparted to the rural masses as per basic education attained.
- ii. Generation of skilled manpower in the rural sector should be given more importance.
- iii. Rural masses are to be trained appropriately in those disciplines, which are both professional and attractive.
- iv. Self-help schemes should be augmented to cover more people, having training as skilled workers to take up Cottage and Small Scale industries.
- v. For landless rural poor, Co-operative farming with incentive like tools, equipments, fertilizers, best quality of seeds and appropriate technology for better output may be considered.
- vi. Training for best utilization of local resources may be imparted to the deserving section, so that earning of better livelihood can be made possible by the utilization.)

III. Managing the environment: Balance between development and environment conservation has to be struck. Forest Coverage of the State has to be maintained as well policy needs to be adopted for those activities which have no pressure on environment degradation. Considering the global climate change, the prime focus to manage the environment by way of covering the cultivable land by green crops, throughout the year to arrest global warming caused by Carbon-Dioxide under different schemes. Sustainable management of natural water resources including surface and ground water. Effective steps should be taken to preserve wildlife for ecological balance as well as tourist attraction. This should be planned in such a way so that there are scopes of generating viable economy.

IV. Markets for efficiency and inclusion: Proper marketing infrastructure is most essential for commercial and remunerative utilisation of resources. The rural economy of the state is largely dependent on the rural markets. But due to lack of infrastructural facilities like road, transport, good location of market and market shades, this economy has not till now bloomed fully. That is why the produce of the interior areas, whether agricultural or horticultural, piscicultural or veterinary-oriented product, is not a suitable position to be channelized through an appropriate sale-network. Getting support price against the sale of such product is also a constraining factor. Accessibility of Market and instrument of inclusion are two important issues 12th Five Year Plan should given due focus on this aspect in the interest of development of economy in the rural areas of the state.

V. Decentralisation, Empowerment and Information: Decentralization of power is essential for ushering in a new era of healthy democracy. The need for Decentralized Planning is well appreciated in order to deal with the felt needs of all section of public, whether in village or in town. For better distribution of resources and with a view to giving maximum benefits of the plan process, there is no better and effective option compared to Decentralized Planning; Effective Governance necessitates people's participation at all levels of decision making and implementation. Focus of the 12th plan must therefore be on institution building for effective governance. The key component of the 'strategy of inclusive growth' must be inclusive governance as the means of empowering the disadvantaged with the aim of enabling them to overcome their poverty. It is the effective empowerment of the disadvantaged through the effective devolution of functions, finances and functionaries to representative institutions of local self-government such as Panchayats (where part IX of the Constitution applies) and Village Council or Community Development Councils and similar such institutions elsewhere, on the principle of subsidiary, which states that anything which can be done at a lower level should be done at that very level. This will pave the way to effective implementation of other measures of inclusive growth. The Sixth Schedule areas District Councils require to be assigned with more development and coordinating roles and powers through state enactments. At present the District Councils lack an organised and focussed development role and responsibilities. Similar is the case for the various tribal development councils. Given the extremely varied forms of governance in the Sixth Schedule areas and the non- Sixth Schedule areas, specificities should be respected while addressing the issues of these areas. Further, accountability should be ensured for the Autonomous Councils under the Sixth Schedule with a proper mandatory and time bound audit.

Apart from the Autonomous Council under Sixth Schedule in the State, other six councils for *Deori*, *Mising*, *Rabha Hasong*, *Sonowal Kachari*, *Tiwa* and *Thengal Kachari* for the tribal people in general areas and eighteen councils for Other Backward Communities have been constituted under State legislation. The infrastructure in these council areas is poor and needs substantial investment for development. These should be factored into the Twelfth plan approach specifically.

The District Planning Committee (DPC) is the other constitutional institution which needs to be strengthened and provided with all supports. These statutory institutions of

governance are to be empowered in true spirit with greater devolution which the 12th plan must highlight and stress upon. A planning cell in each of the Zilla Parishads should be created and supported to have an organised approach to decentralized and participatory planning.

VI. Technology and innovation: A substantial chunk of resources is allocated for funding research and innovative technology development activities in all fields, be it agro processing, agri technology, electronics, engineering, medical sciences or any other field that by researches evolve and innovate for access to services at cheaper rates, saving of time and efforts and reductions on cost inputs. Unless the Twelfth Plan approaches singularly perceives the agenda of strong fundamentals in Research and innovation a progressive growth at higher rates will not be translated.

The Government of Assam proposes to adopt Geographical Information System (GIS) based planning and monitoring whereby GIS platform shall clearly delineate available resource and provide the edifice for bottom up planning. The planning process on GIS will also be rolled out for institutionalized Management Information System (MIS) for monitoring of implementation of all schemes on key monitorable indices which shall be systemically assigned. This technical exercise shall be a huge technical challenge and once initiated and tested out on pilot manner shall necessitate support in lieu of financial resource to be scaled up for the entire state. The intention to place the State's interest on record is to ensure the Planning Commission's support accordingly. Steps has been also taken to set up a Centre of Innovation, Planning & Resource Management to undertake research, consultancy, training and allied activities for the purpose of improving efficiency in the process of economic development planning, innovative studies, resource management, democratic decentralization, local self governance and to provide institutional support to the State Government in preparing need based current and perspective plan.

VII. Securing the energy future for India: According to the 18th and 19th Electricity Demand Assessment Survey, the peak hour electricity demand in Assam is likely to rise to the level of 1700 MW (in 2015-2016) from the present demand of 1075 MW. As on today, Assam State Electricity Board has to mobilise additional power of 150 MW which may need to be increased to 400 MW by the end of 2012 since the own generation of Assam Power Generation Company Ltd (APGCL) and combined Share of the Central Sector Generating Stations (CSGSs) viz. NEEPCO, NHPC is only around 800 MW.

Despite progress under the Power Reform Programme since 2005 several deficiencies need to be addressed such as (1) Increasing shortfall in the availability of power (2) High aggregate electricity loss (commercial and technical) (3) Poor and Weak transmission & distribution network (4) Electrification of only around 30 % of the households in the State (5) Poor service quality to the customer.

In the current power situation universal access to electric power is not likely to be in the realm of possibility, largely due to shortage of power and distribution system. The only remedy is to harness the hydel power potential through mini/micro hydel projects on a

wider scale. Fulllest utilisation of natural gas for power generation, that is relatively cheaper and eco0-friendly.

VIII. Accelerated development of transport infrastructure: All habitations to be connected with all weather road within a time frame. All National Highways and State Highways to be upgraded and proper maintenance to be ensured. In case of rural connectivity, PMGSY is playing a vital role. But there is some shortcoming which needs remedial steps in case of the state in particular. Under the PMGSY programme, construction of RCC Bridge is funded up to the length of 50 metre only. In Assam, the entire state is criss crossed by many rivers and rivulets. It is observed that on an average almost one bridge is necessary in every 7 Km and there are many bridges required to be constructed requiring length of 100 metre and above. Therefore, construction of RCC Bridge should be funded up to the length of 100 metre under the Pradhan Mantri Gram Sadak Yojana (PMGSY) programme. The scarcity of stone materials has affected progress of the work in almost all the districts in Assam. As a solution, the State government has started using precast concrete interlocking blocks in the carriage ways. Moreover, instead of boulder protection for erosion mitigation Vetiver grasses have been planted.

There are about 2383 Semi Permanent Timber Bridges (SPTB) remain to be taken up for conversion to RCC bridges. This initiative needs to be supported with resources in the Twelfth plan period.

A specific lacuna which needs to be addressed is that in the rural areas habitations are connected under the PMGSY and various schemes take up on priority. National Highways and State Highways , however, the connectivity vis major districts roads other than State Highways often is neglected, leaving an infrastructural gap that needs to be addressed in the Twelfth Plan period.

IX. Rural Transformation and sustained growth of agriculture: To improve the living and livelihood condition of rural masses some steps could be:

- i) In Agriculture sector, creating more irrigation potential to trap the scope of installation of 8.00 lakh STW/LLP in the State as suggested by Central Ground Water Board which is at present less than 1/3rd of the above. Creation of Employment Generation and enhance Farm Productivity by massive programme under Farm Mechanisation. Massive programme on sugarcane, jute as cash crop, paddy/wheat/maize/finger millets as cereal, pulses & oilseeds , Emphasis on waste management to produce organic compost.
- ii) Development of Horticulture, fisheries and livestock through technology application and provision of all required inputs.
- iii) Provide institutional finance, particularly micro credit.
- iv) Substantially improve rural connectivity.

- v) Development of infrastructure for growth of small and cottage industries, handloom and sericulture sectors.
- vi) Coverage of all villages under rural health care, safe drinking water and sanitation etc.
- vii) Development of local skill.

X. Managing Urbanization: Urban sector is faced with twin problems of lack of resources and also lack of managerial capacities. Massive direct public investment is required to take care of acute lack of urban infrastructure in the State. There is an urgent need to continue and enlarge programmes for development of Small and Medium Town under Jawaharlal Nehru National Urban Renewal Mission (JNNURM) and earmarking of 10% of the total resources for the North Eastern States. There should be also policy for addressing squarely the problem of urban poverty.

XI. Improved access to quality education: Given the goal of universalisation of education upto the secondary level, it is important to note a few facts in the State. Gross Enrolment ration of the state has been lower than the national level viz. Only 31.5 against 45.5 of the country. The rate is particularly lower amongst the girls 27.7 (2008, MHRD).

The other important issue is the availability of trained teachers. It is seen that only 29 percent of the secondary teachers are trained in the state whereas about 89 percent teachers are trained in the country as a whole (MHRD, 2007). To clear the backlog of untrained teachers and to produce quality teachers. The under mentioned steps need to be taken during 12th five year plan.

1. Infrastructure development of teacher training Institute as per need.
2. Appointment of additional teaching staff in the Teacher Training Institutes for introduction of double shift of training to clear the backlog of untrained teachers.
3. Introduction of Pre-service Teacher training Course in DIETs, CTEs and B.Ed. Colleges.
4. Development of Teaching Learning Materials.
5. Research and Action Research programme.
6. Capacity building programme for teachers and teachers educators to improve the professional competency.
7. Conduct of State Level and District Level Science Exhibition.
8. Short term and long term training programme.
9. Intensification of school visit and spot academic support programme for improvement of teaching in schools.
10. Establishment of DIETs, CTEs, B.Ed. Colleges in the uncovered districts of the state.

The universalisation up to secondary level of education during the next five years would therefore, call for definite actions in increasing enrolment not only at the level of primary but also at the level of secondary and reducing the dropout rates at all levels of elementary education (I – VIII). Most importantly, this has to be done across gender, region and communities. It may be noted that enrolment and dropout rates at the elementary level of education are favoured against women, under-served and difficult areas like hills and chars, and minorities and therefore, these should receive special attentions and ear-marked allocations.

There are multi-dimensional divides in literacy (adult) and enrolment in the state. The most important are the rural and urban, male and female and across social groups and specific communities. The equitable strategy requires recognition of these divides and should aim for their redressed.

The 12th plan, at the all India level has targeted gross enrolment ratio of 20 by 2017 and 25 by 2022 in higher education. In the state this would be demanding targets as the gross enrolment in higher education is rather low. In particular, the rate is lower amongst SC, ST and minorities; also gender gap is conspicuously high. However, given the provision of resources, we are confident to achieving the targets.

Technical and vocational education would continue to receive importance as accelerated growth would demand more trained and skilled labour force at various levels. There is scope for effective PPP mode in supply of quality higher education as well as technical education and vocational education. The 12th plan should emphasise on these aspects of education in the state.

The higher education sector in the state needs to be emphasised on specific lines. First is removing the demand-supply gap in the sector through expansion of infrastructure in terms of quality institutions and man power. PPP mode has great potential in complementing the government in this area. Second is the expansion in feeder structures in terms of student intake and classrooms to meet the statutory demands at the university levels, which can cater to the needs of marginalised sections of the society including the poor and Scheduled Castes, Scheduled Tribes and other Backward Classes.

XII. Better preventive and curative health care : There is no doubt that healthcare is best delivered in rural and remote areas using ICT Tele –medicine , tele-radiology, tele-consulting are some of the key areas which require focus in the 12th Plan period. Building of the Electronic Medical Records a very important step in quality health care delivery. EMR should be effectively built right from preventive care phase, so that a sound medical history is maintained. Appropriate ICT infrastructure in hospital and CHC/PHC levels are much required. Right from patient registration to discharge summary , usage of PACS (Picture Archival and Communication system), implementation of treatment protocols, OPD/IPD patient Communication System), implementation of treatment protocols, OPD/IPD patient management, ICT assisted diagnosis and disease management, drug procurement and distribution, online birth and death registration disease mapping using GIS, especially vector

borne diseases are the key areas that would require dedicated ICT intervention in the curative health care segment.

1.6 SECTORAL POLICIES & APPROACHES FOR THE TWELFTH FIVE YEAR PLAN

AGRICULTURE AND ALLIED

Agriculture:

The economy of Assam continues to be predominantly agrarian; the dependence of rural labour force on agriculture and allied activities was nearly 53 per cent as per Population Census, 2001. The contribution of Agriculture sector to the State Domestic Product was more than 25 per cent during 2009-10. Out of total farming community in the State, 85.25% small and marginal farmers. The development of agriculture is not possible without addressing the issues related with the small and marginal farmers of the State. The issues are to be addressed way of transmission of technology of sustainable Agriculture production system reviving/ reorganizing the past successful T & V system. Mobilization of foreign resources in terms of aids to the State will be of immediate needs to boost up productivity of food crops through T & V as experienced in the past. Agriculture Sector may further be intensified along with people's participation. The Agriculture Growth Centers as per needs of the locations specific can be handed over to NGO's for affective utilization of available resources such as Tractors, Power Tillers, LLP, Thresher etc. in the area. The concept of improving the efficiency of expenditure to derive the benefits for farming community will be given top most priority during the 12th Plan by-

- Proliferation of plan scheme based on local needs /feasibility/ availability/ recommendation from the grass root level involving PRI.
- Imposing accountability right for submission of the scheme / sanction / release of fund /implementation in proper crop season to enhance efficiency of expenditure.
- Modification of subsidy design for backward State like Assam under Central Scheme and may be enhanced considering the bottleneck of the transport system/ economic backwardness.
- Managing proper man power resources along with capacity building for implementation of the scheme.

Slow increase in the productivity is one of the key concerns of the department which will be given stress to increase the skills of planners/ field functionaries /farmers along with labours for employment generation in the Agriculture sectors. This will be made possible by way of –

- Massive efforts at expanding training to enhance skills through departmental programmes.
- Developing efficient and fair labour markets based on skillness such as driving/repairing of farm machineries, handling of PP Equipments, Agriculture labours/ post harvest management through KVK/ FIAC/ Exposure Visit.
- Govt. incentive for growth of enterprises such as establishment of micro enterprises in food product, sale counters, processing units, packaging chamber for export of raw products, homemade fiber industry etc.
- Undertaking different productivity oriented schemes/ projects for economic upliftment of small and marginal farmers.

Considering the global climate change, the Agriculture Sector will give prime focus to manage the environment by way of-

- Covering the cultivable land by green crops, throughout the year to arrest global warming caused by Carbon-Dioxide under different schemes.
- Strict prohibition against diversion of Agricultural land to other purposes.
- Sustainable management of natural water resources including surface and ground water for crop development and productivity.
- Selection of low water exhausting crops viz. during rabi season.
- Mitigation strategies for climate change by massive schemes under pulse crop, cereal crops, preserving soil fertility by use of integrated nutrient management system/ organic products.
- Strict formulation and implementation of pesticide act against sale/ use by the sellers and buyers respectively to arrest haphazard application of chemical insecticide, fungicides in the field.
- Emphasis on waste management to produce organic compost for application in the Agriculture sector.

To increase the efficiency of markets in the interest of farming community and consumers, the department is paying emphasis for infrastructure development of markets under RKVY and Externally Aided Project (EAP) by way of –

- Establishing Rural Hats/regulated markets/ whole sale markets with proper storage facilities.
- Establishing sale counter at important marketable places for MSP of produces.

- Formation of Grower Societies and incentive to produce Pick up van for transport of Agricultural produces from remote areas to the marketable places to secure MSP:
- Good governance of markets through involvement of PRIs.
- Creation of Godown facility/ Cold storage in the markets.

Participation of all disadvantaged class of farming community mainly small and marginal farmers in determination of specific needs for the agricultural sector is most essential, The following steps are proposed to be adopted in this regards:

- Involvement of small and marginal farmers in preparation plan/programmes at grass root level (PRI).
- Making awareness training on new technology /monitoring and evaluation of the plan and programmes.
- Wide publicity of all schemes/ programmes at public places by hoarding and through media.

To improve the living and livelihood condition of rural masses through all round development of Agriculture, the Government may adopt the following steps-

- Creating more irrigation potential to trap the scope of installation of 8.00 lakh STW/LLP in the State as suggested by Central Ground Water Board which is at present less than 1/3rd of the above.
- To create Employment Generation and enhance Farm Productivity by massive programme under Farm Mechanisation.
- Filling up of all existing vacant post in Extension functionaries to educate the farming community for adoption of new technology and proper execution of all Schemes. Massive efforts on expanding training to enhance skill through departmental programmes such as FFS, Exposure Visits, and Workshops etc.
- Schedule on preparation/formulation of crop plan as per specific local /zonal/regional needs in the state.
- Massive programme on sugarcane, jute as cash crop, paddy/wheat/maize/finger millets as cereal, pulses & oilseeds.
- Thrust on spice crops such as onion and garlic.
- Emphasis on preserving soil fertility, air and water by application of INM/IPM/ Organic Inputs.
- Emphasis on waste management to produce organic compost.
- Emphasis on low exhaustive tillage/water crops such as niger, linseed, sesame as additional income to the farmers which will put impetus of rural poverty alleviation.
- To make the State self sufficient in seed production of paddy, pulses & oilseeds.
- Undertaking different productivity oriented schemes/ projects for economic upliftment for small and marginal farmers/women farmers.

- Co-ordination with AAU/ ICAR Research wing along with intellectual and Departmental Extension Wing to sort out specific plan/programme.
- Special consideration for transport subsidy of fertilizers to the backward State like Assam by the Gol.
- Pre-positioning of fertilizer in ahead of Rabi season in the State to arrest non-availability of fertilizers.
- Emphasis on selection of low volume high value crops will be paid for value added Agriculture to improve the economy of the farming community.
- To put impetus on marketing sector by development of rural hats/regulated markets/whole sale markets/ sale counter along with storage facility such as rural godowns and cold storage.
- Emphasis on formation of Growers Society with Govt. incentives.
- Wide publicity of schemes /programmes by hoardings/media.
- Resource Mapping from Grass root level within a specified time frame by involving efficient Govt. Institutions/ Private Institutions.
- Judicious use of water/rain water harvesting.
- In addition to Grower Societies, progressive farmers and Private companies related to Agriculture may also be encouraged.

Animal Husbandry:

As the livestock sector is responsible for providing food and nutritional security of the people by providing milk, meat, egg etc therefore thrust has to be given to this sector, since the sector is not dependent on rain like agricultural sector and investment can result in growth of economy of state including creation of employment opportunities for small and marginal farmers. The main strategies and primary focus areas of the veterinary sector should be on (1) breed up-gradation through artificial insemination to enhance milk production (2) poultry development programme through backyard poultry farming practise and broiler production for enhancing meat and egg production (3) piggery development programme to meet demand of pork (4) goaterly development programme to meet demand of meet

Dairy Development:

Efforts should be made to achieve the production level of milk to attain the minimum per capita availability of 208 ml per day as recommended by ICMR. We need to develop adequate infrastructure to ensure procurement and processing of milk produced in the state, organising milk producers for efficient procurement, processing and marketing and awareness among milk producers, traders and consumers regarding clean milk production. Establishment of Bulk Milk Coolers (BMCs) in the milk potential areas and incorporation of insulated road milk tanker for maintaining cold chain with BMCs, milk processing plants and central dairies shall be a key infrastructural input. Rural farmers should be motivated to form dairy cooperative societies and SHGs and Milk Producers

Institutions (MPIs) which should be provided with support inputs viz. Cattle feed, subsidy, in transportation, feed ingredients and in green fodder, concentrated feeds etc.

Fisheries:

The Fisheries sector in Assam is developing during last few years with consistent growth rate. The growth rate in fish production for the years 2008-09, 2009-10 and 2010-11 have been 8.4%, 5.8% and 6.5% respectively. Against the level of fish production of 190 million kgs during the year 2007-08, the figures stood at 232 million kgs during 2010-11. However, the production has all the time remained below the demand. The yearwise production level during the 11th Five Year Plan, trend of growth and increase of demand etc are shown below:

Year	Production (in million kgs)	Growth p.c. (Production)	Demand (in million kgs)	Increase of Demand in P.C.	Shortfall (in million kgs)
2007-08	190	-	210	-	20
2008-09	206	8.4%	224	6.7%	18
2009-10	218	5.8%	235	4.9%	17
2010-11	232	6.5%	248	5.5%	16

The present markets of other protein food like meat etc are increasing very alarmingly but the price of fish almost constant. Hence fish is gradually becoming popular due to its high value of protein and low price.

The strategy required to meet the growing demand is that about 15,000 hectares of water areas is to be brought under fish cultivation and the per hectares fish production has to be increased to 3000 kgs.

The Fishery sector has provided livelihood and rural enterprise to about 42000 rural people of the state during the last five years. We need to emphasise for development of water bodies like derelict waters, low lying areas, ponds, beels, wetlands (repair- renovation- restoration and mechanical de-weeding and de-siltation) for production enhancement and focus should also be retained on establishing modern hygienic retail and wholesale fish markets, processing centres, ice factories and fish sale hubs to create a producer's market by minimising involvement of middle men.

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There is a need to mobilize additional resources for infrastructure development through reorientation plan priorities and delivery mechanism. At this stage, mobilization of additional resources through cut in food and fertilizer subsidies may not be a wise option. A more effective implementation of the subsidy scheme is urgently required. This should not be allowed to affect the motivation of the farmers to achieve and compete. On the other hand, development of rural infrastructure should not be hindered.

India with more of its population in the young working age group (and, therefore, low dependency ratio) can be a leading productive force in the world. Compared to this scenario, it is expected that world will face shortage of skilled man power to the extent of 56 million by 2010. This 'demographic dividend' needs to be exploited through various skill enhancement program. Further, employment needs to be generated in all the sectors namely, primary, secondary and tertiary sector. Employment generation activities should be promoted. Skill development plan for all uncovered areas should be the primary focus.

Sustainable management of scarce natural resources compatible with desired level of growth and International protocol may be the main priority. Sectoral policies need to be fine tuned according to this focusing on mitigation and adaptation to climate change. To develop models for ensuring environment sustainability in agriculture and allied sector. Environment Impact Study be made compulsory for all land and water development schemes. Access to clean water, air should be ensured to all the citizens.

There is a need for well organized market in the Fishery sector for ensuring remunerative price for the produce of the fish farmers. Fish markets require improvement in terms of hygiene and accessibility for the fish producers. This will eliminate the middlemen and results in higher investment in the sector as the fish producers' income level will increase.

Participation of stake holders in policy formulation for the development of the Fishery sector will lead to empowerment of the stakeholders and lead to the growth of the sector. Providing information to the fish farmers on the latest scientific fish farming technologies will not only lead to the accelerated growth of the sector but also empower them to a great extent.

Innovation and strong R&D in any growth sector is of utmost importance. Scientific research in the Fishery sector needs to be promoted. Technology transfer to the end users must be ensured without any time gap. The extension mechanism as well as the infrastructure of research and development institutions should be developed for their optimal use. The network of Government laboratories and research institutes should be made more effective by developing their human, financial and physical resources. Government should promote and support private initiatives in the field of innovation. Dissemination of best practices should also get the required priority.

An efficient transportation system focusing on rural connectivity will ensure the competitiveness of the sector including its efficiency and productivity. Absence or poor and inadequate connectivity to the market acts as a disincentive to the fish farmers as they are deprived of getting remunerative price for their fish produce. Accessibility to markets therefore must be ensured.

Fishery sector can play a vital role in ensuring nutritional security of the rural people by providing affordable nutrition from fish. The sector has played a leading role in the growth of the rural livelihood by providing employment and additional income to the rural masses.

Cooperation

It is felt that enhancement of skill and human resources in the Co-operative sector must be for a prosperous Society, which will ensure guarantee of inclusive growth of the poor, downtrodden and economically weaker sections of our society.

The need of the hour is to enforce cohesiveness among the weak through education and training so that they can take part in the fast race only in groups and not individually. Since Co-operative is a collective effort of individuals uniting together voluntarily to form an institution and running it autonomically in a democratic manner, the Co-operative seems to be the best solution. For achieving success by Co-operative, it needs interface by academicians/ scholars and people having wide experiences in the different fields of activities. Further, there is great need for research to explore new ideas and thoughts to develop modules best suited to the Co-operatives/regulators and managers.

During the forthcoming Twelfth Plan, utmost emphasis should be laid on:

- Revival of short term and long term Cooperative credit structure in the State.
- Rejuvenation of Consumer Cooperatives.
- Involving women in the economic activities.
- Providing housing facilities to economically backward classes.
- Revival of potentially viable Cooperative enterprises and closure of sick units.
- Enlargement of farming activities through Dairy, Fishery, Agricultural farming and other allied activities.
- Strengthening of Cooperative movement through spread of Cooperative Education, Training and leadership development.

Environment & Forest

Assam has 34.4% of the total geographical area under forest cover. Total revenue earned during 2004-05 in this sector is Rs. 23.78 crore of which Rs. 2.02 crore is from timber and Rs. 21.76 crore is from other forest products like bamboo, cane etc. The State Government is conscious of the impact of future climate variation and seriously concerned with initiating appropriate mitigation and adaptation measures. It is indeed laudable that the Ministry of Environment and Forest (MoEF), Government of India is creating a centre of

excellence at NEHU to undertake climate related research in the North East. There is need to coordinate and to take on board all research initiatives in the region and I am sure NEHU would take such initiatives in its research fold.

Agriculture and forest are two climate sensitive sectors in Assam and in the entire N.E region. The State of Assam will lend its full support in implementing the activities under the Green India Mission. Besides, two externally aided projects for Assam are in pipeline. One under Indo-French Development Co-operation will focus on eco-restoration and livelihood security the other with German support is a multi-sectoral regional project which will concentrate on climate change adaptation strategy

The focus areas under this sector during Eleventh Five Year Plan to increase revenue are:

- Promoting cultivation of high value non traditional forest species like bamboo, cane, herbs, shrubs, medicinal plants, aromatic plants, aromatic plants and orchids etc.
- Prevention of rapid decline of bio-diversity and promoting research & development.
- Management of natural resource bases to integrate with livelihood support to the fringe people.
- Continuation of existing schemes of afforestation & eco-development but in an intensive way.

Rural Development

The primary sector as a whole has to receive utmost importance for realising the goal of accelerated and inclusive growth in the state. This is so because over 85 percent of the population in the state lives in rural areas and rural economy is predominantly agrarian. Moreover, about 75 percent of the directly people depend on the sector for livelihood.

Increasing the rate of growth in the sector, in the first place, would require sizable investment and capital formation. Given the agrarian structure of the state one must appreciate and stress on the role of public investment and public management of infrastructures like irrigation, power and flood control and therefore, higher allocations in these areas are to be ensured. Latest available data on capital formation in the state show that only about 17 percent gross fixed capital formation took place in agriculture during 2005-06 and it has been predominantly through public sector. Since most of the farmers are small and marginal, gross fixed capital formation at the household level is difficult to achieve. Also private sector being more manufacturing oriented importance of the public sector in the sector's growth becomes evident.

Notwithstanding, in creating the infrastructures of massive scale requiring huge investments involving higher economy of scale, scope of appropriate mode of public private

partnership may to be explored. The government of Assam already announced its PPP policy. This has to be supported by necessary rules process for which has to be expedited.

It is well recognised in economic theory that for accelerated growth, mere expansion of primary inputs of labour and capital is not enough. The increased investment needs to be supported by increased growth in total factor productivity, and several studies have pointed out that lack of growth in total factor productivity is, inter alia, arresting the agricultural growth in the country in general, state being no exception to this.

The total factor productivity itself is a combination of pure technical progress through research and development (R & D) and the ability to utilise factors more efficiently, the latter often being made possible by economic and institutional reforms which enhance productivity.

As a part of the reform agenda providing title-ship and tenurial security to the farmers along with some guarantee to remunerative prices would impact positively on household income and savings, which in turn would supply effective stimulus to gross private capital formation in the sector. Expectedly, this would bear strong spill over effects enabling and strengthening markets for inputs and implements proving further impetus to the growth process.

Guaranteeing title-ship and tenurial security is also needed for developing an effective land market in the state. At the same time protection and conservation of land must be accorded top most priority. Therefore, problems of flood and erosion have to be addressed holistically with urgency for its all pervasive effects on life, livelihood and resources. The 12th plan must ensure a special package for flood and erosion management in the state.

Simultaneously comprehensive livestock improvement, adopting a crop insurance policy to cover the risks in production, priority lending to agriculture and allied activities with a focus on raising the credit-deposit ratio and enhancement in the coverage of extension services need to be ensured.

Importance of non-farm sector needs to be put into appropriate perspective for effective rural development. This is important broadly in two respects, one, to reduce the excess burden on agriculture and raise the productivity thereof; and second, to offer better employment opportunities which in turn may reduce the flow of rural-urban migration.

Developing a vibrant rural non farm sector would require recognition of the entrepreneurial character of rural people in particular and productive competitiveness of the rural sphere in general. The rural industrialisation and small scale innovations should attract focused attentions. There is a scope for trying some forms of public-private partnership in this area.

At the same time, emphasis must remain on programme based approach towards improving the dimensions of quality of life in rural areas. This is not only essential for realising the goal of inclusiveness but also needed for managing rural-urban divide in access to basic amenities and services as well as rural to urban migration. However, thrust has to be on quality of services offered and assets created through them and effectiveness and efficiency of their delivery mechanisms. Issues of governance and accountability, therefore, would assume utmost importance.

Irrigation

Assured irrigation is the corner stone for higher agricultural production. The ultimate irrigation potential of the State is 27 Lakh hectares, out of 38.39 lakh hectare. Irrigation potential created till date is 7.99 lakh hectares i.e 29.44 percent of the total and balance potential needs to be covered in a phased manner. Certain strategies for immediate benefit of the farmer's community such as tank irrigation can be adopted, the advantage of such micro-irrigation schemes being the lower involvement of capital investment for creating irrigation potential, lower maintenance and operation cost, shorter gestation and immediate benefit to proximity farmer and a minimal supervision cost. Strategies that need to be adopted to reduce the gap between potential created and potential utilised, wherein, a better synchronisation between the irrigation potential created and agricultural extension inputs being provisioned and steps are taken to strengthen Water User Associations (WUA). There can be an attempt at creating irrigation potential to tap the scope of 8.00 lakh shallow tube wells (STW)/Low lift Pump(LLP) in the state as suggested by the Central Ground water Board, which at present is less than 1/3 rd of the above. The mention of restructuring of AIBP to incentivise irrigation reform and efficiency of water and setting up of a Water Regulatory Authority being a precondition for AIBP approvals is well intended but should not be a blanket approach; instead, it should be contextualised with the local needs.

Water Resource

FLOODS AND EROSION PROBLEM

1. Erosion is a major problem which has afflicted the State's economy. Since 1954 Assam has lost approximately 4,25,900 Ha of land mass due to bank erosion which accounts to 7.4% of the gross geographical area of the State. Bank erosion which has caused major human and economic disaster than the annual flooding of the river. 4,521 villages have been lost and 9,00,000 families affected. The main factors responsible for bank erosion are hydraulic and bank material factors. Aggradations of the river bed, intense braiding, large water discharge, heavy sediment load since the earthquake of 1950 are the main factors responsible for causing the river extremely unstable in the major identified erosion prone areas of Majuli Island, Matmora, Rohmoria, Nagaghuli-Maijan, Kaziranga, Howlighat and Palasbari areas.
2. Various schemes in a number of erosion affected reaches have been executed in the recent past and more schemes are proposed under the various Central Sector

Schemes like Flood Management Programme (FMP), Additional Central Assistance (ACA), NABARD assisted RIDF-XI, XII and XV, NLCPR, NEC etc.

3. It is the endeavour and commitment of the Govt. to protect the interests of the State so far as Riverbank Erosion mitigation is concerned. The ambitious plan of the Govt. of Assam in the proposed Asian Development Bank(ADB) funded Assam Integrated Flood and Riverbank Erosion Mitigation (AIFRERM) Program to be implement from 2010-11 for protection of Dibrugarh, Kaziranga and Palasbari areas in the final stages of being taken up for implementation. It may be mentioned that in the 11th Five Year Plan under Flood Management Programme, the Govt. of Assam could take up the important 'Matmora Geo-dyke' Project successfully.

As the sources of flood are not only within the State but also beyond the State, the flood and erosion protection measures need to be considered as national problem and tackled accordingly.

4. The embankment system of Ranganadi and Dikrong rivers in LAKHIMPUR District of Assam are severely affected by the unregulated release of excess water from the reservoir of the Ranganadi Hydro – Electric Project (RHEP). The embankment system of the Ranganadi and Dikrong rivers due to flood and erosion has stood as a formidable problem warranting immediate measures for raising and strengthening of embankments along with anti-erosion measures to protect the basin of both rivers from further flood devastation.
5. In order to develop sustainable, integrated river management programme to mitigate erosion and flood menace in Assam, the State Government has submitted a proposal for a knowledge based project called "Assessing and Analysing the integrated Hydrologic-hydraulic System Dynamics of the Brahmaputra River Basin of North East India" to be considered for funding under Indo-German co-operation. In fact a lot of work has been done on the upper reaches of Brahmaputra under a project called Brahmatwin by IIT, Roorkee and Friedrich Schiller University at Jena at Germany. The proposed project will be a continuation of the same study for downstream so that reliable data can be generated for stimulation of flood protection projects in Assam. This is of utmost importance to Assam for developing an integrated flood management strategy and therefore needs to be taken up at the earliest.

Industries & Commerce:

In order to mobilize Domestic and Foreign Resources, it is proposed to take the following measures during the 12th Five Year Plan.

- **Creation of Industrial Infrastructure** at each of the 219 blocks of the State for promotion of Micro & Small Enterprises, for which substantial amount of plan fund

will be required for acquisition/ procurement of land as well as development of Infrastructure.

➤ **Industrial Corridor:** In order to cater to the growing demand of industrial land as well as in order to encourage Industrial; development in areas other than city centres, acquisition of land is proposed under Industrial corridor project.

➤ **IID/ Growth Centre and CDP for MSME:**

State Govt. being a facilitator, will have to provide suitable Infrastructure to the potential investor from within and outside the region and for existing Micro & Small Enterprises. Continuing schemes like Growth Centre, Border Trade Centre, IIDs & MSME CDP will have to be completed and some more centres will have to be created in the state.

➤ **Subsidy:**

Govt. of India already declared NEIIPP, 2007 for NE region which will be effective till 31-03-2017 (i.e. during the 12th five Year Plan). The policy needs to be continued for NE Region.

However it is observed that Micro units are not able to reap the benefits of the policy due to various reasons like procedure for claim/ quantum of documentation etc. In order to encourage growth of Micro enterprises in the trouble torn NE Region, a separate policy for Micro enterprises with simplified procedure / documentation is required so that these units could avail the benefits and contribute towards employment generation as well as economic development of the region.

The pursuit for progress in Industries cannot be made unless there is skilled /trained manpower. For enhancing skills and employability, following strategy may be adopted:

- Providing vocational training to school dropouts, existing unskilled workers etc. to improve their employability by optimally utilizing the infrastructure available in Govt. / Private Institutions and the Industry.
- Demand driven short term training courses with Flexible delivery mechanism (part time, full time, weekends, onsite and offsite) to suit the needs of various target groups.
- Testing and certification of skills acquired informally.
- For development Agro & Food Processing Industries, a Food Processing Training Institute (similar to CFTRI) needs to be established in Assam.
- Further, a special policy for setting up of Technical Institute for skill Development and up gradation of existing institutions needs to be implemented during 12th Five year plan.
- Scheme / policy for disposal of e waste.
- Capacity building of organizations producing goods & services through introducing and implementing Clean Development Mechanism (CDM) through which emission of Green House gases like carbon dioxide can be reduced.
- Green Productivity (GP) concept needs to be implemented and fund should be made available to State Industries & Commerce departments for capacity building and other inputs.

Improvement in markets for goods & services could be done through market linkage, both forward & backward linkage. Forward linkage in overseas countries through opening of outlets for traditional products like handloom, handicrafts etc will boost export of these products. For sectors which are dominated by public provisioning, market could be improved through e-governance.

Besides, the domestic market, international market for products of land locked State like Assam, could be improved through Border Trade with neighbouring countries. As many as 8 Land Custom Stations (LCS) of Assam are available for Bilateral Trade with Bangladesh viz. Dhubri Steamerghat, Mancacher, Golokganj, Silchar RMS, Karimganj Ferryghat, Sutarkandi, and Guwahati Steamerghat. Similarly, for Bilateral Trade with Bhutan, there are 3 Land Custom Stations viz. Darranga, Hatisar and Ultapan.

All these Land Custom Stations needs to be improved with adequate infrastructural facilities and needs to be activated.

There are lot of grass root level innovators in the State who are working in an unorganized manner. The following strategy may be adopted to incentivize / encourage innovators:

- Innovators should be brought under organize sector.
- Proper inputs for Design & Development of Commercially viable products.
- Funding for innovation.
- Setting up of office for registration of patents in the state, so that innovators could patent their products.

Further the Following Strategy may also be adopted:

- Preparation and implementation of detailed action plan on development of Biotechnology.
- Providing scientific inputs for exploration and exploitation of natural resources on a sustainable basis.
- Support to R&D programme for utilization of locally available raw materials like bamboo for development of new and useful products etc

Solar lighting system needs to be made compulsory for all Govt. offices and fund for the same may be provided during 12th Five Year Plan.

Mining:

Assam is richly endowed with mineral resources. However, optimum exploitation could not be possible primarily due to existence of deposits in disadvantageous locations. At present, the exploitation of minerals in the State comprises of mainly Petroleum (Crude), Natural Gas (Utilized), Coal and Limestone. During the year 2009-10, the volume production of Coal in the State was 1203 thousand MT, Crude oil 4738 thousand MT, Natural Gas (Utilized) 2476 MCM and Lime stone 402 thousand MT as against the volume production of 1147 thousand MT Coal, 4673 thousand MT Crude oil, 2603 MCM Natural Gas (Utilized) and 363 thousand MT Lime stone in 2008-09. During the year 2007-08 the volume of

production of Coal was 1101 thousand MT, Crude Oil 4361 thousand MT, Natural Gas (Utilized) 2397 MCM and Limestone 381 thousand MT. It reveals from the data that while the production of three major minerals, i. e. Coal, Crude oil and Lime stone recorded increase by 4.9 per cent, 1.4 percent and 10.7 per cent respectively during the year 2009-10 over 2008-09, the production of Natural Gas (utilized) decreased by 5.1 percent during the said period. In the Twelfth Five Year Plan period (2012-2017) emphasis is needed to be given on detailed investigation of mineral and ground water resources of the State of Assam more vigorously for their commercial and judicious exploitation. Some Cement Plants have already been established based on the limestone deposits located in the districts of North Cachar Hills and Karbi Anglong. For efficient use of the limestone reserves, some more large/medium capacity cement plants are being planned to be set up in the State of Assam primarily in the joint sector through the Public/ Private Partnership routes. Similarly thrust is being given in investigation of coal deposits more extensively for utilization in power generation plants to be set up in the State in near future. Other minerals like iron ore, silimanite, china clay, glass sand etc. would be given more attention for their development.

Environmental management plan for mining areas would be required to be prepared and implemented properly so that the impact of mining activities on the environment is minimum possible and mining & environmental management progress side by side. Minerals, petroleum and their value added products of the State have ready markets in the North Eastern region and elsewhere. Due emphasis is needed to be given for having well-regulated markets so that the State receives due share of royalty, sales tax, VAT, etc. such that the proper value of the minerals, petroleum, etc. is realized. Adoption of advanced technology commensurate with safety and minimum impact on the environment would be encouraged and implemented in the mineral development activities as well as in mineral investigation programmes for better results. Added efforts and investments would be needed to be made in undertaking exploration operations in search of more hydrocarbons in the State to cater to the demand of energy resources. Assam Hydrocarbon & Energy Company Ltd., Directorate of Geology & Mining, Assam Oil & Gas producing companies and other agencies would be required to play a more active role in this regard in near future. Scientific & systematic mining of coal for increasing the production would be needed to be adopted by the coal producing companies to meet the growing need of power generation plants and industrial units. Adoption of switching over to non-conventional & renewable energy like hydropower, wind power, solar energy, etc. would have to be encouraged in a bigger way with very less impact on the environment.

Sericulture

Total raw silk production in India has increased with an Annual growth rate of 5.6%. Vanya Silk production showed an annual growth rate of only 3.67 % over the years. In this section Assam alone produces 95% of Muga silk and 65% of Eri silk of the country's total production.

Almost all the silk produced is consumed within the State, there has been tremendous demand of these eco friendly silk in the world for which the State has an opportunity to increase the export earnings. In order to increase the growth rate of Vanya silk from present rate of 3.67% to 6-7 % which is also possible, will need more investment of resources in infrastructure through both Public and Public- Private Partnership. Central Govt. may like to take steps for increasing investment in sericulture through these sectors.

More and more areas of Sericultural food plantation may be increased which may create ecological balance alongwith economical growth of the local people.

Demand for next-gen product is increasing faster than traditional ones, which can be fulfilled through organization of large number of entrepreneur /NGOs who could intervene global market through their entrepreneurship still in Muga and Eri sector. These entrepreneur/NGOs need to be supported by providing proper facility and capital support for marketing of products.

Handloom

Handloom sector has the highest potentiality for providing employment to the people particularly in the rural areas.

Handloom & Textiles is to double the production level of the weavers of the state by 2020 and to achieve that goal, increase the production level by more than 60% during the 12th Five Year Plan.

Endeavour will be made to induct more modern and efficient looms in the sector besides increasing qualitative changes in the infrastructure, more marketing facilities and also enhance quality/ variety so that the income level of the weavers are increased and more and more people take up weaving as a commercial venture with achieving the ultimate goal of increasing productivity and growth.

There are about 25.00 lakhs such people in the State which is the highest in a single State in the country. It is essential that the skill of the weavers and the ancillary workers are greatly improved and enhanced. There is need to upgrade all existing facilities and create new facilities for higher skill up gradation in production and design so that along with enhancement of production more employment is generated.

Handloom and Textiles sector gives maximum employment while protecting the environment to the greatest extent. Emphasis will be given to replace the wooden looms with steel frame looms to ensure absolute environment protection.

Since the weavers are neither well oriented toward marketing their products nor are well organized towards marketing challenges ,the 12th Five Year Plan will give attention to

creation of open , integrated and well regulated market for the weavers of the State. At the same time it will be endeavoured to bring in controlled exposure to the challenges of the products of the other states of the country to boost the competitive atmosphere of the sector. With a view to this end steps will be taken to set up a Handloom Haveli at the State Head Quarter so that facilities for purchase of Handloom products of the country under a single roof could be created and at the same time boost the competitive spirit of the weavers of the state. It is proposed to envisage a two prong strategy for the purpose. These are:

- a) Institutional research and designs through the existing institutes for imparting trainings on handloom and textiles such as Assam Textile Institute (ATI), the Sualkuchi Institute of Fashion Technology (SIFT), the Handloom Research & Designing Centre (HRDC). The 12th Five Year Plan will ensure strengthening of the HRDC under the Directorate of Handloom & Textiles by providing more infrastructures and experts so that the weavers of the State can be given better guidance for producing more innovative high-end products.
- b) A number of private organizations, NGOs, Entrepreneurs etc. are also working for technological up gradation and for bringing new innovations to the handloom sector. It will be the endeavour to boost the efforts of these people through new schemes so that while bigger market share outside the State and the Country is gained by the handloom products of the State on the one hand, new technologies and innovations are spread among the common weavers of the State so that the overall technology and innovation of the handlooms sector is improved and the income level of the weavers are subsequently increased.

Handloom weaving sector thrives in the rural areas of the State. Urban areas have much lesser contribution to this sector in Assam. For ensuring sustaining growth of the sector in the rural areas concerted efforts for rural transformation is a must.

The handloom sector has not grown as a commercial venture in the state and it is practiced by most of the women folk in the rural areas as a pastime and in some cases to supplement the family income to a very small extent. This mind set has to be changed if we are to double the production of handloom sector by the end of 2020. This requires development of infrastructures and adequate amenities and at the same time encouragement of rural men folk to take up weaving as a commercial venture or a source of income. The emphasis of the proposals of the 12th Five Year Plan will be towards boosting the income of weavers from weaving. At the same time exposition of its potentiality as a great income provider shall be highlighted in the rural clusters which are thriving in several parts of the State. This will necessarily require creation of infrastructure for sustainable growth of the sector such as common facility centers with adequate facilities for designing, dyeing, weaving etc and other amenities like marketing facilities and weavers' welfare

activities. It is also proposed that the number of commercial looms will be doubled during the plan period for enhancement of production.

Employment and Skill Development

Economic theory postulates that jobless growth is not sustainable. This is because increasing capital alone without expansion in labour simply cannot produce growth all the time. While population grows steadily over time, if employment potential is not expanded alongside, underemployment and unemployment would cause lack of effective demand in the economy and economy will witness depressive tendencies.

It must be noted that limited and almost stagnant growth of the secondary sector in the economy of the state for a long period of time has put a natural limit to growth of services as well since these two sectors are complementary and should therefore grow together. Given the situation, immediate emphasis is needed to be placed on rapid growth in allied sectors like sericulture, dairy, livestock, horticulture, and agro-processing. This would absorb surplus labour from agriculture and would raise productivity in agriculture and result in higher income per capita.

Micro, small and medium enterprises, are generally more labour absorbing, and are also potential seedbeds for innovation and entrepreneurship. The policy environment must encourage the growth of these industries. The main effort should be to provide these smaller industrial units with adequate infrastructure which includes both reliable power supply at reasonable cost, good transport connectivity, a pool of skilled labour to draw upon and a financial sector capable of making resources available to potentially successful entrepreneurs.

Creation of critical infrastructure in storage, transportation, marketing and finance has strong employment potentials. Some of the service sectors like real estate, construction, transport, insurances and information technology have tremendous growth as well as employment potentials. These sectors are to be assigned with appropriate focus. Self-employment and wage employment schemes & programmes, nevertheless, would continue to receive attentions.

Skill development has been long neglected and should be placed in proper perspective. Data reveals that about 90 percent of labour force engaged in productive activities lack any formal skills and trainings prior employment. This adversely affects quality of labour input and lowers productivity.

This is simply inconsistent with the goal of double digit growth. Therefore, skill development at all levels must receive priority and infrastructure for it needs to be enhanced.

Increased investment and gross capital formation in agriculture would also generate some demand for skilled employment. This is expected to generate an adequate labour demand and supply thereof would ensure an effective labour market. Therefore, in the supply side, role of education and possibility of public private partnership may be thoughtfully examined.

Increasing employment opportunities for all sections of people together with enhancing employability of workforce would be the main focus in the next five years with an emphasis over long term employment security to support and sustain myriad dimensions of inclusive growth.

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Education

Education has remained and would continue to remain at the core of the inclusive agenda for growth. Nationally, universalisation of education up to secondary level and increasing the gross enrolment ratio at the higher level of higher education have been put as topmost priority. These are important national objectives given the statutory mandates of the Right to Education Bill. These, therefore, would also receive focused attention in the state.

The universalisation up to secondary level of education would require increasing enrolment not only at the level of primary but also at the level of secondary and reducing the dropout rates at all levels of elementary education (1-VIII). Most importantly, this has to be done across gender, region and communities. The universalisation of and child face a setback at the conflict prone areas and therefore, these areas must be accorded with adequate focus.

The 11th plan has attempted at the universalisation of primary education and has emphasised on creation of adequate infrastructure in terms of additional schools and teachers. Proportion of out of school children and rate of dropout as well as enrolment were planned for improvement. The success and achievement in the state in realising these have been mixed. While school infrastructure has seen definite face-lift the net enrolment ratio at the primary level is still remains at 88.8, below the national level of 95.9 and dropout rate at the elementary level stands at 73.5 well above the all India level of 43 (2007-08).

The universalisation up to secondary level of education during the next five years would therefore, call for definite actions in increasing enrolment not only at the level of primary but also at the level of secondary and reducing the dropout rates at all levels of elementary education (1-VIII). Most importantly, this has to be done across gender, region

and communities. It may be noted that enrolment and dropout rates at the elementary level of education are favoured against women, under-served and difficult areas like hills and *chars*, and minorities and therefore, these should receive special attentions and year-marked allocations. The studies show that the universalisation of education and child nutrition face a setback at the conflict prone areas and therefore, these areas must be accorded with adequate focus.

The creation and improvement of physical infrastructure would continue to meet the unmet demand in the state would now cover the secondary level. The Annual Status of Education Report (2010) shows that there are about 54 percent schools needing toilet facility, 60 percent schools needing drinking water, about 20 percent schools needing library, 39 percent schools needing playground, 80 percent schools needing boundary walls and 20 percent schools needing kitchen sheds for mid day meals in rural areas of the state. About 39 percent of schools are still single teacher schools out of which 45 percent are not having required student teacher ratio. Therefore, appointment of sufficient number of teachers and training thereof are two major needs in achieving true universalisation. Training of teachers is an essential requirement for quality education.

Apart from the quantitative expansion, the education in the state must see qualitative improvement. This is important for it would ensure the quality labour input into the growth process with higher productivity and, therefore, faster growth. This would also enhance employability and provide better livelihood opportunity and security.

The Annual Status of Education Report (2010) shows that at the all India level 36 percent of class III-V student in rural areas cannot read texts of class I and about 41 percent cannot do simple arithmetic meant for class I. About 53 percent of class V students cannot read class II level textbooks. In rural areas of the state, it has been found that about 72 percent of class V students cannot read class II level textbooks, and 55 percent of them cannot read textbooks beyond class II. About 34 percent of students in class I can read nothing and, about 31 percent of class I students cannot recognise any numbers. These clearly point to worrisome condition of education in the state in terms of quality. Besides, the differences in quality between rural and urban, government and privately managed schools need to be bridged.

The 12th plan, therefore, has to place adequate emphasis on quality of education imparted and teachers' training accordingly must receive focused attention. Right form of PPP mode in teachers training can be experimented with.

The 12th plan, at the all India level, has targeted gross enrolment ratio of 20 by 2017 and 25 by 2022 in higher education. In the state this would be demanding targets as the gross enrolment in higher education is rather low. In particular, the rate is lower amongst SC, ST and minorities; also gender gap is conspicuously high. Further, there are some concerns regarding the supply side of higher education and quality aspects of it.

Technical and vocation education would continue to receive importance as accelerated growth would demand more trained and skilled labour force at various levels. There is a scope for effective PPP mode in supply of quality higher education as well as technical and vocational education. The 12th plan would emphasise on these aspects of education in the state.

The higher education sector in the state needs to be emphasised on specific lines. First is removing the demand-supply gap in the sector through expansion of infrastructure in terms of quality institutions and man power. PPP mode has great potential in complementing the government in this area. Second is the expansion in feeder structures in terms of student intake and classrooms to meet the statutory demands at the university levels, which can cater to the needs of marginalised sections of the society including the poor and Scheduled Castes, Schedule Tribes and Other Backward Classes.

Healthcare

Health is the other core agenda of inclusive growth. During the 11th plan, physical infrastructure in healthcare has seen significant expansion and key health indicators have shown signs of improvement. However, this expansion is yet to be supported by proportionate expansion in other complementary components in healthcare. The primary approach of the 12th plan, therefore, should focus on the processes of synergising different components of healthcare services and infrastructure. Most important amongst them is the manpower component and the quality of their services.

The NRHM data reveals that the state currently has about 35 percent unmet demands for doctors and trained physicians. Moreover, there is a deficit of 9.3 percent sub-centres and 49 percent community healthcare centres out of the total requirement in the state.

Improved manpower with improved quality of services would not only impact positively on the key health indicators but also help in better utilisation of assets and infrastructure created during the earlier plan periods.

Both availability of and access to provisioning of quality healthcare services in the state would assume central focus in the 12th plan. While coverage and efficient delivery of existing services would be stressed upon, new provisioning must be initiated during the next five years. In this approach, the primary and basic healthcare should continue to be funded and managed by public sector with an emphasis on universalisation of access while effective PPP mode may be relied on in manpower training and education as well as high end and specialised treatments.

Given the multi-dimensional inequalities of health outcomes across gender, rural-urban, castes and communities both availability of and access to provisioning of quality health care services in the state would assume central focus in the 12th plan. While coverage and efficient delivery of existing services would be stressed upon, new

provisioning must be initiated during the next five years. In this approach, the primary and basic healthcare should continue to be funded and managed by public sector with an emphasis on universalisation of access while effective PPP mode may be relied on in manpower training and education as well as high-end and specialised treatments.

Overall approach in healthcare would conform to four broad elements viz. universalisation and socialisation of basic healthcare, comprehensive and non-exclusionary infrastructure provisioning, equity in access to care and services, and accountability, transparency and participation.

Women, Children and Youth

As has been pointed out earlier, many of the key social indicators are biased against women and children. Illiteracy, under-nutrition, lack of immunisation, endemic anaemia amongst women and children etc create systemic inequality in the society. These are, indeed, serious causes of concern for the state in general. The inclusive growth must redress these inequalities with urgency. The 12th plan would stress upon these aspects of societal inequality and would aim at mitigating them.

Low female participation (20 against 30 for the country) in the state also limits the growth potential. The rate is declining in urban areas and rising in rural areas. This only goes to show that disguised unemployment in agriculture without any value addition. The female unemployment rate in the state is more than double the country average. The youth unemployment rate is also alarmingly high in the state. It is estimated that about 39 percent of the children are under-nourished. The percentage could be as high as 57 percent in conflict zones.

Given these, the coverage, quality and delivery of services under existing programmes must be strengthened and improved. Newer avenues of productive and gainful employment for women and youth need to be created. Skill development and training have to be underlined for the purpose. The under-served areas and sections of people need to be highlighted and special attention has to be given to them. Special programmes or coverage within the existing ones need to be extended for meeting the special requirement in conflict zones of the state.

Issues of child survival as has been pointed out at the beginning needs to be addressed systematically. Similarly issues of child protection must receive adequate focus. Working women and youth hostels, art and cultural development for youths and integrated child right protection schemes need to be strengthened. ICDS needs restructuring and strengthening to meet the real challenges in child nutrition and support services.

Social Welfare and Justice

It is an established fact that inclusive growth strategy should provide legitimate space for old and infirm, disabled, economically weaker and vulnerable sections of society. The

social security provisions for old and weaker sections in the form of direct financial benefits and/or concessional services are important and should therefore, occupy plan priority.

Need is there for universalisation of public distribution system (PDS) and enhancing the basket of goods within the system and the 12th plan must highlight this. This is important with regard to food security of the weaker and vulnerable sections of people. The PDS needs major reforms in terms of lifting of state quota of the foods grains, delivery mechanisms and accountability. These are to be taken up earnestly during the 12th plan period.

Existing national social assistance programmes (NSAP), integrated children development services (ICDS), anganwadi/balwadi programmes also need strengthening with greater scope for peoples' participation, increased coverage and improved service delivery and accountability. The 12th plan must underline systematic reforms in these lines.

Ensuring full and transparent information from user to provider and vice versa is required and the 12th plan must incorporate use of IT to facilitate this. Success of these programmes lies to a great extent in making these services more and more user friendly, and the 12th plan would ensure public provisioning of such user friendly services.

Tea garden and ex tea garden community constitute a major portion of the state's population. These sections are long being deprived of special plan focus. Most of the key social indicators including education and health are awfully low amongst these sections. The 12th plan, therefore, would place a special plan priority to them with a comprehensive programme.

Special Area Programmes

Area Development Programmes in India conventionally have their origins in the theory of balanced regional development. Prevalent wide-scale inter and intra regional inequality in the country has been viewed as consequent on differential resource endowments as well as deficient infrastructure for accelerated growth and development across regions. This, essentially, justifies stylised approach of targeted subvention in the form of myriad Area Development Programmes.

The Area Development Programmes initiated at various points of time have attempted at first, identifying areas homogenous with respect to some definite characteristic and then, redressing growth and development challenges specific to those identified areas. As such, these sets of programmes have encompassed diverse range of areas – coastal, desert, hills, drought prone, flood affected, backward, char, minority, border areas so on and so forth.

Observably, India's planned approach towards higher growth has been guided, more or less, by the domestic savings rate, and also to some extent, by technical progresses.

Notwithstanding, over the last sixty years of planning, major shifts in focus can be noted with regard to domestic savings itself as households and private savings gradually tend to replace public savings in the overall growth framework. The very recent emphasis laid over the public-private partnership mode of investment is basically an outcome of this shift in focus.

The special area programmes, against this backdrop, requires altogether a different approach. This is because these areas share common structural deficiencies in terms of internal mobilisation of savings and hence investment. This provides the rationale of targeted subvention founded on the principles of "big push" towards growth and development. The principle of inclusive growth furthers the necessity of such special treatments.

In Assam presently five main special area programmes are in operation – hills area, char areas, minority areas (MsDP), border areas and backward areas programmes (BRGF). Hills area programmes cover two districts of Karbi Anglong and North Cachar Hills (now Dima Hasao) with relatively low density of population. Hills area in the state is characterized by marginality, remoteness, and difficult terrain, cultural and ethnic heterogeneity.

Char areas in the state covers riverine areas of the Brahmaputra covering about 3.60 lakh hectares of land with 25 lakh populations. These areas are characterised by high density of population, extreme poverty, illiteracy, lack of basic and social amenities, insecurity of livelihood, inaccessibility and flood and erosion.

Minority areas cover 13 minority (religious) concentrated districts of the state. These district share the common characteristics of low levels of literacy, low work participation, lack of basic amenities like electricity, sanitation and housing, lack of social amenities like paved road, schools and health care facilities.

Border areas of the state cover around 2100 kms of inter-state borders, and 532 kms of international boundaries with Bhutan and Bangladesh. These areas are remotely located, difficult to access, backward and they lack basic and social amenities. These areas are marked by extremely limited livelihood options and frequently subjected to border related conflicts and insecurities.

The backward area programme (BRGF) in the state is underway in 13 districts which have been identified as backward with respect to 17 parameters including proportion of agricultural labourer, output per agricultural workers, per capita credit and deposit, infant mortality, crude death rate, rate of immunisation and institutional delivery, female literacy, gross enrolment ratio, percentage of houses with no electricity and drinking water, and percentage of schedule caste and schedule tribes.

It is noteworthy to mention that the areas covered under these set of programmes more or less converge to same districts which goes to show that areas under the special

Area Development Programme are characterised by limited resource and options of livelihood, structural deficiencies in terms of critical basic and social amenities and therefore, are backward.

As stated earlier, since the areas under these programmes lack capacity to mobilise internal savings and hence investment, it is, therefore, warranted that targeted subvention continues on the foundation of "big-push" to bridge the critical gaps and development challenges. However, this approach has been in practice since fourth plan without much take-off.

Given this back-drop, while continuing with the targeted subvention approach for big-push in the areas, for an effective take-off, the 12th plan needs to focus on endogeneity of growth in these areas by higher allocation in education, skill development and health care infrastructure and services.

The productivity in agriculture needs to be raised through higher investment in critical infrastructure like irrigation and extension services so that output per capita increases providing a positive impetus to household savings. Besides, gainful employment in tertiary sector needs to be stressed upon for growth to take off and development to follow.

For all practical purposes unit of addressing backwardness should be made block level to take care of intra district disparity in the line of recommendation by the Second Administrative Reforms Commission.

Since same district is repeated under different Area Development Programmes, the institution of district planning with blocks as primary planning units needs to be strengthened and made functional for appropriate convergence.

While continuing with the targeted subvention approach for big-push in the areas, for an effective take-off, the 12th plan needs to focus on endogeneity of growth in these areas by higher allocation in education, skill-development and health care infrastructure and services. For all practical purposes unit of addressing backwardness should be made block level to take care of intra-district disparity.

Tourism

Implementation of tourism schemes through PPP mode can make tourism industry flourishing and sustainable. Moreover engagement of local community in tourism destinations would be a better option for sustainable tourism and decentralization of economic benefits.

- Introduction of different employment generation schemes.
- Encourage younger generation to work for sustainable tourism and engage themselves in tourism industry to earn livelihoods.

- Promote different training and courses related to tourism sector.

A healthy and rich environment and tourism are two sides of the same coin. Conservation of environment, both physical & cultural, is very much necessary for sustainable tourism. For management of environment in tourism sector. For management of environment in tourism sector following actions can be taken:

- Growing consciousness about environment conservation in tourism destinations.
- Identification of standard Do's and Don'ts for visitors as well as host community in tourism destinations.
- Ban on use of non-biodegradable product in tourism destinations.
- Promotion on zero-waste management practices.
- Opting up for separate trusts for environment (physical & cultural) conservation in every tourist spots.
- Promote cleanliness and plantation of indigenous flora species.
- Scaling of 'carrying capacity' of tourism destinations and restricting the number of visitors to the carrying capacity.
- Identification of Unique Selling Point (USP) for every destination.
- Branding of State tourism.
- Systematic analysis of tourist flows and demands of market.
- Marketing of tourist products according to the market demand.
- Develop feedback mechanism for visitors.
- Encourage community participation in tourism development.
- Encourage women folk for participation in tourism.

- Organizing capacity building workshop for women and youth on issues like 'Role of women and youths in tourism development', 'Spirit of Atithi Devo Bhava', 'Pros and cons in tourism industry' and sustainable tourism 7 conservation issues.
- Use of Information for maximum benefit to the tourism industry.
- Remote sensing and GPS survey of tourism destinations of the state to locate every such places in the tourist map of Assam.
- Creation of GIS database of all tourism destinations with all information of nearest transport connectivity
- Maximum use of conventional energy like solar, wind etc.
- Promotion of nature trail or walk or cycling in tourism destinations to discourage use of motor vehicles
- Promotion of rural tourism with emphasis on maintaining ethics and values of rural life.
- Promotion of agricultural tourism along with sustainable agricultural growth.
- Promotion of organic agricultural practices.
- Promotion of sustainable agriculture for higher production and economic growth.
- Employment generation in rural areas.
- Easy accessibility to nearby city areas from rural areas so that people can easily come and go from city to village without permanently staying in the city center.
- Making people feel and aware about the rural ethics and values
- Preparation of master plan for 'check the explosion of city areas.'
- Emphasis on practicality issue of the present education system. If need importance should give on quality education system which can cater practical issues, job guarantee as well as knowledge of locality, region, world and ethics.

- Use of communication media like TV & Radio etc. for easy accessibility of educational and training facilities

Roads Transport & Communication

An efficient, reliable and safe road network is of paramount importance for the economic growth of Assam as well as that of the North Eastern region.

There has not been much growth in terms of road length or their carrying capacity particularly in the North-Eastern region. Emphasis may be given for extension of the proposed Expressway network in Assam and the North East. Improvement of National Highways/ State Highways may be considered during the 12th Plan-

1. The route from Boxirhat to Rakhaldubi (NH-31) – Rakhaldubi to Goalpara with additional Bridge over Brahmaputra near existing Naranarayan Setu (NH-31 B)- Goalpara to Guwahati (NH-37) connecting East West Corridor.
2. NH-52 from Baihata Chariali (0/0 km) to Jammugurihat (182/0 km) may be converted to 4-lane to connect East-West corridor with the proposed 4-lane connectivity to Itanagar.
3. Construction of new National Highway Nongstoin-Tura- Phulbari- Dhubri-Gauripur including construction of a permanent R.C.C. Bridge over river Brahmaputra connecting Phulbari on the South Bank (in Meghalaya) and Dhubri on the North Bank (in Assam) and further extension of the road to connect the proposed Expressed way Balajan on NH-31 may be considered under the 12th Plan. This route is very important to remove backwardness and faster development of western Meghalaya and Assam with shortest connectivity to Siliguri, the business hub of North Bengal.
4. The carrying capacity of these state highways needs to be upgraded to at least two lane NH standards under 12th Plan.
5. It is essential that the construction of “Dhodar Ali” to two lanes with paved shoulders may be considered under the 12th Plan.
6. The 284 km long NH-44 is the only vital link to connect Tripura with the rest of the country through Assam and Meghalaya. It is essential for up gradation of the NH-44 to four lanes. Hence the proposal may be considered under 12th Plan.

Under the PMGSY programme, construction of RCC Bridge is funded up to the length of 50 metre only. In Assam, the entire state is criss crossed by many rivers and rivulets. It is observed that on an average almost one bridge is necessary in every 7 Km and there are many bridges required to be constructed requiring length of 100 metre and above. Therefore, construction of RCC Bridge should be funded up to the length of 100 metre under the Pradhan Mantri Gram Sadak Yojana (PMGSY) programme.

Conversion of SPT bridges to RCC bridges: - Presently, 2383 Semi Permanent Timber Bridges (SPTB) remain to be taken up for conversion to RCC bridges. This initiative needs to be supported with resources in the Twelfth plan period.

A specific lacuna which needs to be addressed is that in the rural areas habitations are connected under the PMGSY and various schemes are taken up on priority. National Highways and State Highways, however, the connectivity vis major districts roads other than State Highways often is neglected, leaving an infrastructural gap that needs to be addressed in the Twelfth Plan period.

An equipment bank is proposed to be set up on the name and style of "North East Equipment Bank" at Guwahati for creation of heavy equipment resources to facilitate in various construction activities in the North Eastern States. The project will be very capital intensive for which financial support is to be extended by Planning Commission in the future. The management of the project will be on PPP mode

We need to examine on priority the establishment of effective high speed transit corridors, be it air, rail or waterways. These major infrastructure assets would facilitate rapid transit of people and cargo in a cost effective manner which would act as the life line and arteries of a growing economy. This infrastructure is all the more critical given the terrain geostrategic location and land locked constraints of the North Eastern Region.

Information Technology

Use of ICT in Government processes and service delivery models is an important component of growth. The following strategies are suggested in this regard:-

- a. Government Process Re-engineering (GPR)
- b. Skill enhancement and training of personnel and stakeholders
- c. Change management

The educated youth of the State would be required to be properly trained in a professional manner (which is acceptable to the industry) and a certification process must be put in place. It has been observed in the past that training in skill up-gradation alone does not suffice or does not become a strong motivator of undertaking a job outside the state. One is required to provide counselling to the youth and their parents, certification and good industry interface. The following strategies are suggested for adopting in this sector, as regards IT skills are concerned:-

- a. Providing IT/BPO and KPO skills training at block level to the youth of the State
- b. Industry standard certification needs to be provided to the trained youth.
- c. Regular assessment of IT skills of the youth, may be on a six monthly basis is required to be conducted.
- d. Arranging job fairs at district level.

- e. Providing an institutional mechanism such setting up of an IT skills university to provide certifications, quality assurance, finishing schools, up to date industry standard curriculum and a continuous Industry interface to the students for IT projects, apprenticeships and probations.

Several key environmental parameters such as ambient air quality, suspended particulate matter, water quality and other environmental factors could be gathered from strategic locations, such as busy traffic points, dump yards, picnic spots, parks, water bodies using electronic sensors, transducers etc. and coupled with network devices to instantaneously transmit to designated websites and LED displays in the major cities of the State. This can bring about effective awareness regarding the environment among the public.

Using cloud computing an environmental analysis and simulation infrastructure (EASI) could be created in the State which could be effectively used by students and teaching communities, NGOs and environmentalists to compute values of various ecosystem services and environmental parameters, say soil loss during rain, surface runoff, increase in temperature due to burning of fossil fuels and carbon sequestration etc.

The use of GIS and remote Sensing is key to monitor periodically the status of the natural resources such as forest, Wildlife areas and national parks, health of major water bodies etc.

Like many other sectors, ICT sector also generates a lot of waste, which has been aptly termed as e- Waste. Through recycling good amount of plastics, glass, copper, Gold, Mercury, Lead, Chromium, Barium, Beryllium, Cadmium and other metals can be made. Therefore; it is proposed to set up an e – Waste plant at Guwahati in the 12th Plan period. Such a plan could address the needs of e- waste disposal of the entire NE region.

The Common Service Centres (CSCs) should be empowered to take schemes of financial inclusion. Already certain steps have been initiated in this regard. Some of the CSC operators have been provided training from the State Bank of India to become Business Correspondents and Customer Service. If some assistance is provided to the village Level Entrepreneurs (VLE), the scheme could become a runaway success in the 12th Plan period.

Adopting ICT marketing strategies like e-commerce/m-commerce, e-payment, e-auction, e-tendering systems for G2C, G2B and B2B service delivery and creating the required infrastructure to meet the needs accordingly would be another strategy for the 12th Plan.

This is an area core to the deployment, Centralized application architectures can actually be decentralized a process, empower the stakeholders and also disseminate a great deal of information to the public. Use of portals and websites and browser based applications are the key strategies to be adopted in this sector. Extensive use of mobile phone and PDAs could enable real-time flow of information in two way traffic. E-governance and m-Governance hold key to decentralization and empowerment.

Dissemination of information through CSCs, urban semi-urban and rural kiosks, G2C Call centres would also be promoted. Putting up of portals, SMS gateways for information dissemination to the citizens and business would be taken up during the 12th Plan period in a much bigger scale. Women empowerment could also be catalyzed through usage of ICT. Exclusive programmes such as women digital literacy, women IT entrepreneurship development, women IT skills enhancement, especial incentive for girl child in IT sector at school level would be some of the programme initiatives under 12th Plan.

Emerging technology innovations such as OLPC (one Laptop Per Child, Mobile Innovation Initiative (MII), cloud computing and virtualization, Robotics & Artificial Intelligence (AI) are some of the areas where force should be put in the 12th Plan so that the educated youth of the State are able to get opportunities to work on the forefront of technology and be able to produce innovations.

In this regards the following strategies are suggested for adoption during the 12th Plan period.

- a. Adoption of FOSS preparation of Free and open some software (FOSS) in the Government and especially in school and other public institutions.
- b. Adoption of open standards and frameworks to ensure that there is no vendor lock in and communities are free to make innovations.
- c. Building of robust communication network in the rural areas.
- d. Capacity building of the stakeholders in various sectors, including management of Information Technology.
- e. Creation of the art IT infrastructure in the State a. Centre of Excellence and several State and district travel IT centres on the lines of Science for student and youth to get exposure to the latest technologies.

ICT plays a major role in generation and transmission of power. In order to reduce transmission and distribution losses, GIS based mapping and Decision Support System (DSS) to require. The target of the 12th Plan should be to ensure that a GUS based system is implemented right upto the consumer and regular energy audits are conducted through the system.

BOL (Broadband Over Line) is a technology which is fast emerging as a viable alternative to conventional metering and billing and providing Internet to the households.

It is suggested that optical fibre cable OFC net works on the distribution lines should be built and BPL technology advantage should be harnessed in a planned manner so that the total cost of Internet service delivery in the remote areas can be reduced and also automatic metering and billing can be achieved, leading to better consumer management and reduction in T & D losses.

The three key ICT strategies are suggest for the Transport sector:

- a. Network Planning and management System for Transport using SIS based Decision support system.
- b. Transport Services Information Systems
- c. Transport emergency ICT Infrastructure like kiosk.

The biggest bottleneck in rural transformation is lack of right information at the right time because of which no real-time planning and execution can happen. Marketing use of ICT/GIS and GPS and with the help of a small army of volunteers/VLE, a onetime baseline mapping of all resources and infrastructure.

Once such a Baseline Information System is created, delivery of agriculture based services crop insurance, soil nutrition mapping, fertilizer and seeds advisory, weather advisory would become possible through ICT. Another requirement is pricing of the agricultural produce, their sales and elimination of middlemen so that maximum profits go to the growers of the crops. This can surely be achieved through effective use of ICT. All the development departments that have force for delivery of services in rural areas, then can make use of the system to arrive at gaps, failure points, reinforcement requirements and thus ensure that fruits of the scheme reach the intended segments effectively.

Following areas are suggested for ICT intervention in comprehensive urban growth management:-

- a. Providing online services to citizens for payment of taxes – property tax, water tax etc.
- b. GIS based mapping of all the public amenities and infrastructure so that even outsiders and tourists have the right information.
- c. GIS based mapping of all units' property for better property valuation/assessments.
- d. Creation of comprehensive LBS for service delivery to citizens.
- e. Using high resolution satellite images on periodic basis to monitor with and urban sprawl so that strict adherence to the city master Plan; building bye-laws can be ensured.
- f. Use of IP based networks for city surveillance, free emergency help systems, public address systems and disaster management.
- g. Solid Waste Disposal & management – using high resolution satellite image and GPS on
- h. Setting up of a network of public ICT kiosks for 24X7 e-services delivery such as payments of taxes, utility bills and delivery of G2C services.

During the 10th and 11th Plan a small attempt was made to bring ICT in government and government aided schools in Assam under the Rajiv Gandhi Computer Literacy Programme (RGCLP). During the two plan period 969 schools were covered under State Plan and 641 – schools were covered under ICT @ School scheme of the MOHRD, bringing the total to 1610 schools.

The strategy required to be adopted during 12th Plan period must adopt a holistic approach to cover all the government and government aided schools with the following ICT interventions:-

- a. At last 8-10 computer labs must be provided in every school
- b. At least one smart classroom should be provided in each school
- c. In addition to computer, teaching of subject such as Mathematics, Science English, Social Studies should be enabled using ICT tools.
- d. Promotion of Free and open Source Software (FOSS) in the schools for large scale adoption so standard in education service delivery.
- e. Preparation of digital course content such as Spoken Tutorials teaching through various education soft wares such as Calcium, Dr. Geo etc to mention a few.
- f. Creation of block level/district virtual labs where student would learn various experiments online.
- g. District /regional level virtual class-rooms so that quality teachers can reach larger audiences and students across the nook and corners, remote and far flung areas can benefit equally
- h. The process of conducting online examination, mock tests , online personality development and attitudinal change management and grooming of students.
- i. Creation of at least one finishing school in a district where students after graduation /post graduation can take three months course for personality development and industry exposure especially in the IT sector.

There is no doubt that healthcare is best delivered in rural and remote areas using ICT Tele –medicine , tele-radiology, tele-consulting are some of the key areas which require focus in the 12th Plan period. Building of the Electronic Medical Records a very important step in quality health care delivery. EMR should be effectively built right from preventive care phase, so that a sound medical history is maintained. Appropriate ICT infrastructure in hospital and CHC/PHC levels are much required. Right from patient registration to discharge summary , usage of PACS (Picture Archival and Communication system), implementation of treatment protocols, OPD/IPD patient Communication System), implementation of treatment protocols, OPD/IPD patient management, ICT assisted diagnosis and disease management, drug procurement and distribution, online birth and death registration

disease mapping using GIS, especially vector borne diseases are the key areas that would require dedicated ICT intervention in the curative health care segment.

Power

State of Assam is taking up the following measures for securing energy future for Assam.

(Present peak load demand	= 1066 MW / 3694 MU.
Generation (own)	= 376.4 MW.
Generation (External)	= 1679 MW.
T&D loss	= 26.34 %
Demand for next five year (2016-17) projected.	
Peak load demand	= 1782 MW/6654 MU.
Generation (Own)	= 570.6 MW.
Generation (External)	= 1212 MW.
T&D loss	= 22.5%)

A Distributed Growth of Small Power Generating Stations

- Key to Assam's Power Reliability Programme.

Steering clear of possible impact on protests, displacement and rehabilitation of people from mega dam projects, the state has embraced a plan for cleaner, safe and smaller hydel power projects in PPP mode to boost its power reserve.

The Scheme is to have a cluster of small projects evenly distributed across the State within the next four years to generate more than 250 MW of power.

Private Developers selected through transparent bidding process will operate, invest and run the power plant for a period of 35 years after which it will hand over the project to the State Government. During the 35 years period, the developer would sell power to the State as well as give revenue to it in accordance with the policy.

Heralding a new vista for growth of Small Hydro Power Projects in Assam-Government of Assam has already taken up speedy implementation of Small Hydro Power Projects in Public Private Partnership (PPP) mode.

The 4 MW hydel project in Champamati developed by (M/s Hayen Hydel Power Co.) has already started delivering around 1 MW of power at the 11 KV BUS of Kajolgaon Sub-Station. The Assam Power Project Development Corporation Limited (APPDCL)-a joint venture of Power Department, Government of Assam signed implemented Agreement of two irrigation canal based power projects on behalf of the State Government with the under mentioned two Private Developers on 18th May, 2010 ushering a new era of power starve free Assam.

1. M/s Agnipa Energo Pvt. Ltd. for 2MW Pahumara Hydro Power Project in Baska District
2. M/s. Brahmaputra Infrapower Pvt. Ltd. for 5 MW Bordikorai Hydro Power Project in Sonitpur District.

Besides these projects, APPDCL has also identified many more such small power generating stations which are in the pipeline viz. Kalanga I&II (8 MW) in Karbi Anglong District, Desang (9 MW) in Dibrugarh District, Champamati (4 MW), Pagaladia & Rupahi (3 MW), Borpani (40 MW), Apart from these, Assam Power Generation Corporation Limited (APGCL) has also taken up few projects like Mintriang (9 MW). Lurgnit (6 MW), Dhansiri (20 MW), Bordikharu (2 MW), Amring (20 MW).

- R & M of ageing power stations N.T.P.S. and L.T.P.S. are also being taken up for completion in the next five year plan so as to increase efficiency and deliver more power from the same input.
- Reduction for T&D losses envisaged by strengthening the transmission and distribution network which results in saving of energy. In this connection ADB aided project and R-APDRP scheme have taken up.
- Use of energy efficient distribution transformers.
- Providing Solar Energy to remote villages.

Urban Infrastructure

The capacities of the Urban Local Bodies in the whole State including Guwahati are not adequate to handle even the core services including conservancy and water supply. The capabilities of the Urban Local Bodies to create appropriate infrastructure and maintain the same are severely limited. Most of the Urban Local Bodies have a labour intensive work force with grossly inadequate specialized manpower required to provide appropriate services to the citizens. The 12th Plan should focus on providing appropriate support for Business Process Re-engineering (BPR) for the Urban Local Bodies including funds to procure skilled Technical, Managerial, and Administrative and Legal manpower. This will help in ensuring professionally managed Bodies for services like Drinking Water Supply, Sewerage, Drainage and Solid Waste Management.

The role of the Urban Local Bodies vis-a-vis the other parastatal bodies has to be clearly demarcated in order to ensure one-point for redressal of grievances of the citizens. Part IX of the Constitution envisages transfer of subjects to the Municipalities including those listed under the 12th Schedule of the Constitution. The concept of Urbanization is wider in dimension and includes the areas for which Master Plans exist. Further, the services associated with Water Supply, Housing, Solid Waste Management sites are also not confined within a Municipal area only. Therefore there is a need to have a re-look into the matter.

Transport bottlenecks are hindering the smooth movement of people within the Urban Local Body has become a very serious issue. Proper transportation plans, linked with the most planned formulation exercise required to be taken up for most of the Urban Local Bodies, specially the Municipal Corporation. Access of funds for MRTS along with support for an appropriate Master Plan exercise is urgently necessary in order to avoid the massive traffic congestions in peak hours in most of the Urban Local Bodies.

Most of the Urban Local Bodies have been unable to provide basic services like continuous and safe Drinking water Services, Sewerage, Drainage and appropriate Solid Waste Disposal, which require a massive injection of funds, some part of which could only be managed from the funds available under JNNURM. Innovative methods have to be looked into to bridge the huge resources gap.

Public Private Partnerships (PPP)

Mega projects like bridges over River Brahmaputra, Multipurpose Irrigation Projects, and Power Projects require huge investments which can't be supported from state plan resources. Alternative to this is to transfer the construction and commercial risk to the private sector. Public Private Partnerships are now-a-days becoming popular in developed and developing countries.

Government of Assam through its PPP policy notified in 2008 has taken various steps to improve the PPP enabling environment in a programmed manner so as to create physical infrastructure to trigger private initiative.

As of now 42 PPP projects under various sectors across the state amounting to ₹ 8430 crore were identified. Out of which four projects have been completed, ten projects are under implementation and twenty eight projects are under pipeline or in bidding stage.

CONCLUSION

Approach paper is not a document with detailed strategy and sectoral targets of growth. It is only an approach to suggest broad objectives and challenges that the state has to achieve during the 12th Five Year Plan. The proposed broad objectives and strategy indicated in this approach paper are based on the strategy adopted, performance and growth achieved during last five year plan. Our approach for the 12th Five Year Plan in brief would be to:

1. Pursue a sustained growth rate of 10 percent over the next 2-3 decades to catch up with the most developed states in the country.
2. Although economic inequality is low when compared to the rest of the country, we will adopt a policy of comprehensive and effective development programmes to further reduce poverty and economic inequality in Assam.

3. Continue with the ongoing efforts to solve the flood and erosion problem through application of latest technologies and scientific management practices.
4. Continue with the efforts for all insurgent and militants groups to lay down arms, eschew violence and join the mainstream. A generous rehabilitation package will be adopted for benefit of surrendered militants.
5. Target for agriculture sector growth rate will be fixed at 6 to 8 percent per year.
6. Efforts will be stepped up to attract more investment to remove infrastructure deficiency by 2016 in order to enable acceleration economic development.
7. Attain self-sufficiency in power generation and modernisation of the transmission and distribution (T & D) system.
8. Invest heavily in health and education sectors. Private sector investment will also be welcomed in these sectors, if necessary. Our goal is that the Human Development Index (HDI) of Assam can catch those of advanced states of the country within the next 10 years.
9. Ambitious steps will be undertaken for skill development, expansion of professional education and solving of unemployment problem through creation of self-employment opportunities as well as institutional support. Special emphasis will be given on medium, small and microenterprises particularly traditional crafts and cottage industries in rural areas.
10. Special steps will be taken to preserve our rich bio-diversity and environment in the backdrop of global climate change.

National Growth is the sum total of the growth to be achieved by the States & Union Territories. In order to achieve the level of growth that the country proposes, the state would require huge investment in different sectors for which central support will be required in a big way.

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