



सत्यमेव जयते

Task Force on
Connectivity and Promotion of

Trade and Investment

in North-East Regions

Government of India
Planning Commission
New Delhi

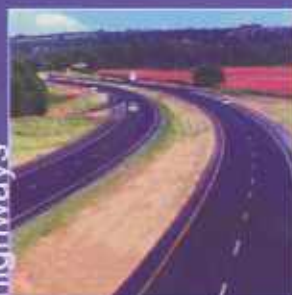
Industry



border trade



highways



railways



airways



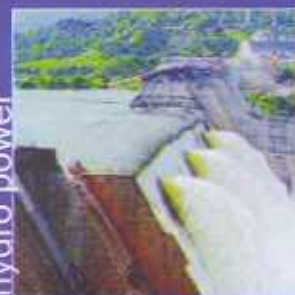
inland water



refinery



hydro power



**Report of the Task Force
on
Connectivity
and
Promotion
of
Trade & Investment
in
NE States**



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**Planning Commission
Government of India**

October, 2006

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PREFACE

Task Force on Connectivity and Promotion of Trade & Investment in NE States

A Task Force on Connectivity and Promotion of Trade & Investment in North East has been constituted at the behest of Prime Minister with the following Terms of Reference:

- (a) To identify for urgent implementation, important infrastructure requirements for enhancing investment and trade, especially in areas of Highways, Power (including NE Grid for evacuating power), Airports, Railways, etc.,
- (b) Critically examine the existing policies and facilities for internal and external trade, especially in view of the emerging opportunities for international and inter-regional trade.
- (c) Identify potential entrepreneurs and investment hubs to attract domestic and foreign investment for greater value addition.
- (d) Suggest measures for relevant human resource development, especially for promotion of education and training in high skills and high demand categories.

This report accordingly identifies for urgent implementation various policies, facilities and infrastructure with the primary objective of promoting trade & investment in the Region.

Natural Resources & Economy of NE States

2. The Region is bountifully endowed with biodiversity, hydro-potential, oil and gas, coal, limestone, bamboo and forest wealth. It is ideally suited to produce a whole range of plantation crops, spices, fruit, flowers and herbs, much of which could be processed and exported. However, barring the Imphal Valley and pockets elsewhere, agricultural yields are low while traditional farming, with a shrinking jhum cycle, has become ecologically unsustainable. Much land in the hills is owned by the community, not the State, though privatization and 'enclosures' are evident in some places.

3. There is no agricultural surplus and limited capital formation and entrepreneurial skills. Assam had seen some earlier development around tea, oil and timber. The Region is, however, basically pre-industrial despite a number of saw mills and plywood factories, a few cement plants and other miscellaneous enterprises.

Unique problems of NE States

4. Mainstreaming the north-eastern (NE) States into the economy of the country remains a formidable challenge. The NE States have unique economic problems arising out of remoteness and poor connectivity, hilly and often

inhospitable terrain, a weak financial resource base, poor infrastructure, sparse population density, shallow markets, inadequate administrative capacity, low skill endowment and finally a law & order situation frequently threatened by insurgency.

State Finances & investment

5. As regards the State finances, NE States differ from deterioration in other States in many respects. First the deterioration in NE States was because expenditure expansion outpaced revenue expansion. Second, although the deterioration in the fiscal deficit of other States was much sharper, the NE States started with significantly higher fiscal deficits notwithstanding much higher central transfers on a per capita basis, being Special Category States. Third, the decline in capital expenditure between 1995/96 and 2003/04 in NE States at 2.8 percentage points of GSDP was much steeper than the decline of 1.0 percentage point in other States.

6. The fiscal vulnerability of NE States is a consequence of low economic activity, the virtual absence of the private sector and the consequent disproportionate burden on the public sector of generating and maintaining economic activity. Moreover, the NE States are

not able to capture the benefits of higher public spending as the incomes and profits out of this spending are largely transferred outside the region. Continued dependence on central transfers has eroded the incentive for these States to raise their own revenues and improve the efficiency of their public expenditures.

Key issues of NE States for trade & investment

7. Though deepening of subsidies & concessions and extension of North East Industrial Policy, 1997 beyond 2007 is required for some time to come, major improvement in connectivity is the key issue. It not only imparts a sense of isolation, but also adds to the transportation cost making trade & investment uncompetitive and cost of providing services very high. The foremost objective of the 11th Plan, therefore, has to be providing highway, rail & air connection to all State capitals and major economic destinations, all-weather roads to all districts/block headquarters and border trade points, and telecom facilities in all villages.

8. NEDFi, NERAMAC, NEHHDC etc., intended to serve the vital needs of the region, have not achieved the objectives. In fact NERAMAC and NEHHDC have virtually become defunct. NEDFi has shown some signs of revival recently.

9. Though the general literacy is high, inadequacy of quality vocational and technical education, particularly in high & market-driven skills, renders unemployment a serious problem, often the cause of unrest & insurgency.

10. Of 50,000 MW hydro power potential identified in the country, North-East alone has over 30,000 MW. Apart from providing cheap power for industrialization, it would be a major source of revenue. Problems, however, of both generation and evacuation need to be solved.

11. Strengthening communities, enlarging their livelihood opportunities and generating surplus for market through scientific use of vast natural resources is another challenge.

Strategy & Action Plan for the 11th Plan

12. The relevant strategy of the 11th Plan should therefore be:

- (a) Pooling of funds available under various programmes for taking up connectivity projects on an integrated & large scale and accordingly creation of Infrastructure Development Fund. Correspondingly, creating a SPV to manage such funds and manage projects approved for NE States by various agencies.
- (b) Promoting investment in utilization of huge hydro-power potential, big reserves of oil, gas, coal, lime stone etc. through better crafted North-Eastern industrial policy of Govt. of India, to be supplemented by regional NE Industrial Policy evolved through consensus among NE States.
- (c) Strengthening of National Horticulture Mission for intensive cultivation of selected horticulture crops in various regions with processing & marketing facilities, undertaking an ambitious regional integrated bamboo mission, and accordingly strengthening ICAR institutions.
- (d) Opening border trade points with modern infrastructure in the fulfillment of 'Look East Policy'.
- (e) Targeted capacity building of the state govt. and NEC officials for improving preparation, implementation, monitoring and evaluation of projects.
- (f) Close monitoring of connectivity projects to ensure projects are taken up and completed within their targeted schedules.
- (g) Major rejuvenation of NEDFi, NERAMAC & NEHHDC through infusion of funds & transfer to joint venture with majority equity (about 74%) holding by private owner.
- (h) Promoting tourism by improving connectivity, tourist facilities and removal of RPA/ILP.

13. Action Plan has accordingly been suggested in the main Report.

Acknowledgement

14. Concerned Union Ministries, Divisions of Planning Commission, States, Industry Associations of NE etc have provided the basic

information and it is they who would ultimately be implementing the recommendations, once accepted. Ms Sarmistha Das has put in sincere & hard work in finalization of this Report.

B.N. Yugandhar, Member
A.N.P. Sinha, Senior Adviser

LISTING OF RECOMMENDATIONS

List of recommendations made under various chapters are as follows:

Industry:

- Develop infrastructure and create other enabling conditions in N.E. Region, which seem to have prime deterring effect on investment in the region (Refer subsequent chapters).
- Geographical isolation further demands invigoration of border trade (Refer Chapter on Border Trade).
- Implement the Report of the Committee on Financial Sector Plan for NER set up by RBI in true spirit (Para 10 of Industry Chapter).
- Provide better incentives under the NEIP, 2007, than those being offered under the industrial policies for the states of Uttaranchal/Himachal Pradesh/J&K.
- Provide differentiated package even among states within NER as most of the investment has taken place in two states of Assam and Meghalaya.
- Promote industrial development based on natural resources of the region like hydro power, gas, bamboo, horticulture rather than investment in Pan Masala, Gutka.
- Enhance the present debt-equity ratio from 60:40 to 80:20 so as to reduce initial investment by the investor.
- States of the Region, under the aegis of NEC, should come together for evolving a comprehensive regional industrial policy so as to make NER a single Economic Unit through removal of internal barriers, uniform taxation regime, promoting NE brand equity etc.
- The regional policy should complement and supplement GOI NE Industrial Policy. These should include quick and easy access to land and credit, availability of quality power and water, transportation networks, warehousing, marketing networks etc. The regional policy should be applicable for 10 to 15 years, to allow for longer gestation period for setting up industries in the Region.
- Strengthen public sector institutions, such as NERAMAC, NEHHDC and NEDFi, transfer in joint ventures (with majority private ownership) and make these proactive to provide professional guidance and support to entrepreneurs.

- Accelerate the activities of various commodity boards for Tea, Coffee, Spices etc. in the Region.
- To enable NEDFi to play a substantial role in the development of NER, sanction Rs.400 crores during the 11th Plan Period as Interest Free Loan conditional upon a good perspective business plan covering all NE states.
- Transfer Growth Centres & IIDCs under implementation in joint venture with private ownership. Set up more Industrial Centre (hubs) after doing feasibility study.
- Adopt Mission approach for specific areas of industrial growth such as bamboo processing, horticulture produce processing and for use of medicinal & aromatic resources.
- Pursue growth of IT sector vigorously and develop IT parks to utilize the literate and educated manpower. This industry is not dependent on transportation networks and raw material supply.
- Incentivise service sectors, Power generation, Bio technology, Tourism related activities, Hospital and Nursing homes and Vocational training institute.
- Since handloom industry is traditional to the Region, evolve a special policy for development of the handloom sector with linkages with the contemporary markets, design, etc. especially for exports.
- Open new ITIs and strengthen the existing with new trade, better faculty & equipments to provide for market – driven high skills. IIT Guwahati could be mentor & guide for the purpose. Create at least one center of excellence in each state through PPP model.
- Promote vigorously NER as an attractive destination for investment through persistent image building & holding of NE Business Summits.
- Establish a major Exhibition and Emporia complex at Guwahati to display industrial products of the Region. The Trade Centre being set up by ITPO at Guwahati may integrate the above activity. Operation & maintenance of this Centre could be under PPP mode along with the local Industry Association.
- Set up some medium and large units through CPUs for promoting investor confidence. Assam Gas Cracker Project & Tulli Paper Plant should be operationalised in a time bound manner.
- Revive or close down the existing ailing PSUs.

Border Trade:

Undertake following rail/road/air/IWT projects based on detailed project formulations and cost benefit analysis:

A. Road Network:

- Improvement and Construction of all weather Highway, RCC Bridges etc, leading to 12 major Land Customs Stations (LCSs).
- Opening of Stillwell Road linking Central Myanmar and China on priority basis.
- Re-Opening of Karimganj-Sylhet-Dhaka Road for Transportation.
- Extension of Amguri-Mokochung-Tuensang Road linking Myanmar.
- Extension of Sibsagar, Sonari-Nemtola Road from Assam-Nagaland border to Lungwa in Myanmar.
- Construction of road from Indo-Myanmar border to NH-54 at Nalkawn (Mizoram) to provide Kaladan multi-modal transport.
- Up-gradation of N.H.39 and 53 connecting Indo-Myanmar Border Via Dimapur & Silchar.
- Up gradation of N.H.40 and 62 & 62 E connecting Indo-Bangladesh Border Via Dawki & Gasuapara LCSs. Improvement of road leading to Borsora LCS in Meghalaya.
- Improvement of road stretch from NH 44 to Agartala LCS.

- Connection with North East to Trans Asian Highways.
- Construction on priority basis 1300 KM long trilateral Highway connecting Moreh (India), Bagan(Myanmar) & Maesot (Thailand).
- Bus service between Guwahati-Imphal-Mandley, Guwahati-Dhaka via Shillong and Guwahati-Tura-Dhaka to facilitate movement of the business community.

B. Railways:

- Restore Mohisashan (Assam, India)-Shahbazpur (Bangladesh) railway traffic to facilitate export of bulk mineral (coal, limestone), food items and agro-horticulture based products from NER.
- Double track the Railway line from new Jalpaiguri to Tinsukia via Dimapur.
- Extend ICD facility at Silchar, Moreh and Dimapur.
- Connect NE with Trans Asian Railways for faster movement of goods.

C. Airways:

- Create an air travel circuit between North East and Bhutan, Nepal, Bangladesh, Myanmar, China, Thailand, Singapore to

increase Export and Tourism from the region.

- Provide an Air Cargo Complex at LGB Airport, Guwahati to cater to Export and Import of goods,

D. Water-Ways:

- Open up and improve Inland water-ways with Bangladesh and Myanmar through a number of river port existing in North East.
- Declare Jogighopa, Moreh, Dawki, Ashuganj and Karimganj as ports of call.
- Government of Bangladesh/ Myanmar to provide access to Chittagong/ Mandalay Port for exports/import from and to the NER. This would help neighbour earn substantial revenue by charging a fee for the use of Roads/ River.

E. Infrastructure at LCSs :

- Construct Integrated Export Complex including Customs Office, Immigration, Banking, Clearing and Forwarding Agents buildings, Truck parking bay, Warehouses, Cold Storage Facilities, Post Offices, Telephone Exchange, Shopping Centers, BSF Complex, Police Outpost, Electronic Weigh Bridges, Electricity, Potable Drinking Water, Health Facility etc at all the 12 notified LCSs.

- Develop Border Town and Trade Centre at major LCSs of NER.
- Open more border trading points with adequate infrastructural facilities and upgrading the infrastructure at non-functional LCS of the region.
- Create more border haats and regularize these haats.

F. Quality Control Facility:

- Set up inspection house, Testing facility for Phyto-Sanitary certificate, Plant Quarantine etc at major LCSs to boost export of agricultural/horticultural products.

G. Banking:

- Create adequate Banking infrastructure for both International and Border trade.
- Banks functioning in NER should have correspondent arrangements with Banks in the neighboring countries. At present this correspondent relationship are restricted to the Banks functioning in Kolkata.
- Install high value currency chests at major towns near LCSs.
- Regularize & institutionalize Letter of Credit (L/C) arrangement between the Banks of India and Myanmar for smooth and enhanced border trade through Moreh & Zokhawthar.

- Reduce Letter of Credit advising charge from Rs.500 to Rs.200 considering LoC value is less than US \$ 20,000.

H. Policy & Miscellaneous:

- Pursue Bangladesh to reduce Tariffs. North East exports to Bangladesh suffer High Tariff Barriers since the Customs duty structure in Bangladesh includes Value Added Tax, Advance Income Tax and Infrastructure Development Charge in addition to Basic Customs Duty.
- Pursue neighbouring countries for duty free import / export.
- Pursue Bangladesh to have corresponding LCS to Demagiri LCS on Mizoram side.
- **Transport Subsidy:** Consider Freight Subsidy @50% for all items of export through L.C.S / Airport or nearest port of call since the exporters of the region have to pay double freight charge, as there is no or little import through various L.C.S. Subsidy eligibility could be verified against transport bills & custom documents.
- **Consulate Office:** persuade neighbouring countries to open their visa offices in the North East
- Ensure more exchange of trade delegations and Buyer –seller meets, Exhibition of goods at regular intervals with neighbouring countries.
- **North East Council (NEC):** should play a major role in the creation of infrastructure for development of export from the region and co-ordinate export promotion efforts in this region with various Union Ministries.
- NE states should bring exports in their development agenda and improve law & order at LCS & enroute.
- **Ministry of Commerce** to take immediate steps to formulate effective North East Exim Policy to provide incentive for export.
- Set up a separate Zonal Joint Director General of Foreign Trade- cum- Development commissioner office in Guwahati with the jurisdiction over entire NE states including Sikkim.
- Review schemes for export promotion (ASIDE, EDF, MDI/MAI, EPIP, STP, AEZ, SEZ) and make these effective. Create SEZs in NER in a PPP mode.
- Develop brand image for special products of NE for export enhancement.
- Create & constantly update interactive website for NER to facilitate border trade.
- Set up a branch of Indian Institute of Foreign Trade in North East for the development of professional manpower and creation of entrepreneurship in Foreign Trade,

I. Measures to reduce informal trade

- Introduce a special package of incentives like DEPB entitlement at enhanced rate of additional 1%
- Have a special scheme on the line of duty free licensing scheme at 5 % of F.O.B value of exports
- Expand the list of tradable goods and commodities under barter mechanism.
- Permit common market trade between India and Bangladesh at selected points for locally produced surplus items.
- Identify locally produced surplus items with some certification of rules of origin and accordingly reduce custom duty to zero.
- Waive off non-tariff barriers like requirement of phyto-sanitary certification for locally produced goods.

Highways:

- Complete Modified Phase A of SARDP-NE as planned.
- Take up the Trans Arunachal Highway (about 1254 km), as mentioned in para 4 of the chapter, urgently and complete on top priority through BRO.
- Take up the road links in Manipur, as mentioned in para 4 of the chapter, on top priority.
- Complete Phase B selectively based on resources availability in the 11th plan.
- Construct a bridge (4 km) at Sadia/Dholaghat point to connect NH52 & NH 37 for enhancing accessibility to upper Assam, Dibang HEP, and foothills of Arunachal and support strategic border areas in Walong & Anini sectors of Arunachal.
- Encourage PPP for road development with increased viability gap grant.
- Construct bridges between Jorhat and north Lakhimpur & between Dhubri & Phulbari over Brahmaputra in PPP mode considering its importance and cost implication.
- Take a policy decision that MORTH will take up only Highways, NEC only MDR roads and NLCPR only ODR roads, to avoid overlap of efforts.
- Build capacity of PWD's staff in road engineering & management, planning for development and proper maintenance of road network. Strengthen road management & maintenance cell in each state.
- Develop benchmark indicators for quality control of roads and install an inbuilt system of monitoring through random checks and field inspection.

- Address the lack of availability and capacity of local contracting and consulting services in NER. Provide incentives to improve capacity of local contracting with clause for adherence to quality control norms.
- Ensure quality contracting through hiring of professional firm to improve quality and for timely completion of the project.
- Establish a separate unit for road research at IIT, Guwahati or a branch of Central Road Research Institute (CRRI) in the NER to provide technological support to road and bridge construction activities in NER given its unique climate, geography and geology. Introduce new and modern technology in road construction & maintenance work.

Railways:

- Complete the ongoing projects in the 11th plan (para 3 of Railway Chapter).
- Declare following projects as National Projects or finance through GBS:
 - (i) Rangia-Murkongselek gauge conversion along with linked fingers
 - (ii) Bogibeel rail-cum-road bridge project
 - (iii) Harmuti-Itanagar & Murkongselek-Passighat for Arunachal
 - (iv) Dudhoni-Depa & Azra-Byrnihat for Meghalaya

- (v) Sivok-Giellikhola and further be extended to Rangpo for Sikkim
- (vi) Bhairabi-Aizwal for Mizoram
- (vii) Dimapur-Zubza (Kohima) for Nagaland
- (viii) Agartala-Akhuara for Tripura

Other rail links/gauge conversion could be taken up out of Railway's own resources including 10% obligation for NER.

- Take up Guwahati Bye Pass railway line urgently for diverting passenger and freight away from the main city for movement to upper & lower Assam and to Manipur, Mizoram, Tripura.
- Extend Lumding-Badarpur section gauge conversion to existing/proposed railway lines in Manipur, Mizoram and Tripura.
- Take up warehouse infrastructure improvement (as suggested in para 7 of Railway Chapter) on priority.

Air Connectivity:

- (a) Construct airports at Pakyong (Gangtok) & Itanagar (Arunachal) with increased viability gap funding from GOI.
- (b) Operationalise non-operational airports in NER (Rupsi, Passighat, Kailashahar, Tezu) and expand scheduled air services to smaller airports (Zero, Kamalpur) which were in fact being serviced earlier.

- (c) Do not count flights to Guwahati from Delhi towards 10% obligation of airlines for Category II States.
- (d) Rs. 35 crore provided by NEC to IA be borne by MoCA and provided to airlines/operators based on competitive bidding subject to their operating from NER and running air service to smaller places having landing facilities. In the meantime, the hub for operation and maintenance of IA services to NE be shifted forthwith to Guwahati from Calcutta as per the agreement with NEC. Silchar be developed as another Air hub for NE states, it being equidistant from NE capitals (except Sikkim).
- (e) Ensure convenient daily air link from all operational airports of NER to Kolkata & Guwahati in quick phases.
- (f) Incentivise private operators to start at least weekly flights to international destinations.

Inland Water Transport:

- Renew Indo-Bangladesh IWT Protocol on long term basis (at least 5 years)
- Evolve Policy dispensation and Package of incentives for modal shift in favour of IWT especially for bulk cargo. Transport policy/ planning implications of this suggestion be examined by an expert group. Suggestions include viability gap funding of 20 paise per

ton-km, extension of Inland Vessel Building Subsidy Scheme, IWT development fund for equity participation, SPV for vessel leasing, New scheme for mechanization of country crafts.

- Make NW-2 (Dhubri-Sadiya 891 km) fully functional
- Declare Barak River – as National Waterway No.6 and develop it.
- Support alternate route (Kaladan Multi Modal Project) connecting Mizoram and Myanmar (para 6 of IWT Chapter)
- Stronger and professional IWT Directorate in Assam holds the key to IWT prospects in the NER. Its Institutional strengthening is, therefore, urgent and necessary.

Power:

A. Generation:

- (i) Complete the incomplete projects of 10th plan in the 11th plan along with the capacity addition programme for the 11th plan (Annexure-III & V).
- (ii) Do not count cost of security, diversion of roads etc towards the project cost and fund through Govt. Budgetary Support.
- (iii) Fund DPR preparation of promising power projects.

- (iv) Review urgently the recent norms of Net Present Value for assessing the cost of Forest Diversion which has added huge burden on the storage hydro schemes, making them unviable.
- (v) Considering low density of the population in NE states, local demand would be better served with smaller projects feeding independent local grids, minimizing T&D costs and logistic problems.
- (vi) **Hydel Power in Arunachal:**

Arunachal has decided not to encourage HE Project involving large storage. As there are very few suitable sites for construction of multipurpose storage projects, Arunachal should allow it for providing attendant benefits like full generation of power round the year, irrigation, drinking water, flood control, etc. to the other constituents of NE States also. Arunachal could be compensated with a package such as mentioned at para 4(c) & (f) of the Power Chapter.
- (vii) Constitute an empowered committee for clearance of project to reduce delay in allotment, if need be through Centre's constitutional role over inter-state rivers and river basins.
- (ix) Utilize part of the revenue generated through sale of free power for displaced people.
- (x) Treat land submergence in the storage based power projects as equity.
- (xi) Identify zone for easily implementable projects and cluster of projects in a single region to reduce both infrastructure and transmission costs.
- (xii) Undertake Survey & Investigation of HE Projects through experienced hydro-power developers to minimize the geological uncertainties during construction. Electronically operated Theodolite Survey Machines (EDM) along with lightweight drilling machines need to be used for geological surveys. Global Positioning System (GPS) also to be provided.
- (xiii) Convert identified Meter gauge to Broad Gauge rail links & extend rail network, develop adequate road network & strengthen existing roads along with construction of bridges, air services, effective telecommunication for smooth implementation of identified HE projects (Annexure-IV).

B. Transmission and distribution:

- (i) Build high capacity lines for evacuation of power from various HEPs. Devise modalities for commitment to pay transmission charges accordingly. It would be desirable to adopt the national approach in which beneficiaries outside NER share the transmission charges of identified transmission system in NER

based on power allocation from NER generation projects.

- (ii) Strengthen transmission and distribution system to provide uninterrupted power supply particularly to industrial Areas. New Sub-transmission and adequate distribution infrastructure through APDRP would be of great help.
- (iii) Bring about greater competition in creation of transmission assets, increase debt component and move to competitive bidding to reduce transmission charges in NER.

C. AT&C Losses:

AT&C losses of NER being very high in comparison with all India averages implement suggestions given at Annexure-IX.

D. User charges & Reforms:

Rationalise user charges. Presently, it is quite low. Moreover, create power utilities in all states (only Meghalaya and Assam have done so) to develop expertise in various areas of power sector.

INDUSTRY

Present industrial scenario

Large and Medium Industry

The growth of industry, large, medium and small scale, has been very slow and also uneven within the Region. The Region has 178 large and medium scale industrial units (table below). Of these, more than 70% are in Assam, and even within the State, half of the units (56%) are located only in three districts i.e. Kamrup, Tinsukhia and Dibrugarh. Petroleum and tea industry has dominated the Region's industrial activity and these sectors have been in existence for over a century now.

Other important industrial sectors include plywood, chemicals, petrochemicals and fertilizers, paper and pulp, engineering, textiles and jute. Many of the medium and large units were established as Public Sector Undertakings and investment in such units by private sector is absent, except in tea and plywood industries. Even plywood industry has lost its ground due to the order banning cutting of trees without a definite work plan, resulting in closure of nearly 300 plywood units. Tea industry is severely affected by insurgency, ageing tea plantation, low value addition etc, though some measures have been taken recently.

Status of existing industries

State	L&M units in 1999	Regd.SSI Units (01-02)	Unregd. SSI Units (01-02)	Total SSI Sector
Arunachal	17	255	997	1252
Assam	129	14453	179926	194379
Manipur	12	4599	43400	47999
Meghalaya	10	1939	20581	22520
Mizoram	1	2733	8383	11116
Nagaland	7	568	13293	13861
Tripura	2	959	23393	24352
Sikkim	N.A.	174	194	368
Total	178	25680	290167	315847

Though NE Region constitutes 3.8 % of India's population, it has only 1.87 % of the registered SSI units in the country. In fact the traditional Handloom industry is in the decline. Even the ambitious sericulture project taken up in Manipur through JBIC assistance is a non-starter.

2. Causes of stagnation in trade/ investment:

Some of the causes are:

- (a) High risk perception of NES, inadequate infrastructure to support trade and investment, low capacity of existing arrangements to promote trade and investment, and institutions not designed to promote public-private or private sector led trade & investments.
- (b) Lack of framework for enabling convergence of cross-sector issues in trade promotion - policies, legal, and institutional, barriers to entry (inter-state trade), financing and risk mitigation, marketing and distribution.

3. North East Industrial Policy (NEIP), 1997:

As stated earlier, NER suffers from disadvantages of geographical isolation, transport bottlenecks, small market size, low investment

and virtual absence of private sector. Growth rate of SDP in this region was hovering around 2-4% as against National Average of 7% during 1993-2000. Share of Industry in GDP is only 2.16% for this region as against national figure of 27%. In order to address the inherent problems, GOI at the first instance initiated Transport Subsidy Scheme in 1971 and subsequently notified NEIP, 1997. The package includes following concessions/ incentives:

- Increased equity contribution of Rs.15 crore by GOI in Growth Centres
- Enhanced GOI funding in Integrated Infrastructure Development Centres
- For new units and capacity expansion of existing units at identified locations and engaged in production of items under thrust area:
 - 100% exemption of Excise Duty and Income Tax for 10 years.
 - Capital investment subsidy @ 15% on plant & machinery up to maximum of Rs.30 lakh.
 - Interest subsidy of 3% on working capital loans.
 - Insurance subsidy by way of reimbursement of 100% insurance premium.
 - Transport Subsidy- 50-90% subsidy on transport cost incurred on movement of raw

materials and finished goods from designated rail heads/ ports upto industrial units.

4. Impact of NEIP, 1997:

An Impact Evaluation Study was carried out by TATA Economic Consultancy Services (TECS). Its findings are as follows:

- Excise duty exemption/ refund constituted single most significant claims (82%) (Tobacco, panmasala etc. are the highest recipient).
- Investment Scenario reveals a skewed profile with Assam and Meghalaya accounting for almost 91% of overall investment due to their resource base (tea, limestone, coal etc.) and better power situation in Meghalaya.
- Greenfield units accounted for 72% of investment.
- No large investment has taken place as a result of NEIP. 69% of units fall in the investment range upto Rs.1 crore.

Subsidies				Exemptions		Growth Center	Pending claims	Total (Rs.crore)
Transport	Capital	Interest	Insurance	Excise	I. Tax			
227.02	26.82	3.05	0.10	1363.02	NIL	22.20	22.55	1664.76

- Against this, impact on various states is reported as under:
- On considering disbursed incentives and revenue forgone on account of excise duty/

State	No. of Units Assisted.	Investment (Rs .Cr)	Employment (No)
Assam	520	528.19	12422
Meghalaya	61	441.01	6056
Nagaland	46	19.64	439
Arunachal	11	39.86	577
Tripura	34	31.58	665
Mizoram	4	4.00	300
Manipur	5	3.00	250
Total	681	1067.28	20709

IT exemption so far of Rs. 1664.76 crore as costs and investments of Rs.1067 crore as benefits, NEIP, 1997 would be seen as an inefficient instrument for promoting industrial growth in the region.

- Value of Excise duty exemption is high. But its effectiveness, has remained limited in the absence of specific criteria of value addition. Investments are not only of lower order but also in the shape of franchise to a significant extent.
- Transport Subsidy is relevant to NER due to the difficult topography. But the disbursal mechanism needs to be streamlined.
- Interest Subsidy and Capital Investment Subsidy have not evoked significant response so far.

5. Recommendations in TECS Study:

On the basis of findings, following recommendations have been made:

(i) On Extension of NEIP:

- NEIP 1997 should be extended for a period of 5 years beyond 10th Plan.

(ii) On Modification of NEIP 1997:

- Units and/ or investment made (Greenfield/ Brownfield) anywhere in NE Region should

qualify for securing benefits instead of present restrictions of notified areas.

- Central Capital Investment Subsidy may be modified to reflect a graded structure to induce higher level of value addition and employment generation.

(iii) On Requirement of Induction of New Elements:

- Ambit and scope of NEIP should be expanded to include segments of services sector like IT Sector, Construction/ Real Estate activities, Health Care and Tourism.
- Investments in the defined services sector should be granted exemption from service tax for cases where capital investments exceed Rs.25 crore and/ or employment generated exceeds 300 persons.

6. Subsidies/ Fiscal Incentives to Other States:

- The Government has announced two packages for J&K and Uttarnachal/Himachal Pradesh on 14.6.2002 and 7.1.2003 respectively. The contents of these packages are similar to that of NEIP 1997.
- States like Uttaranchal and Himachal Pradesh, although industrially backward, are strategically placed in proximity to

resources and major markets. Therefore, they enjoy inherent advantage compared to NER.

- Several major manufacturers like Hindustan Lever, Proctor & Gamble, Godrej etc. who have set up their units in North East, now are in the process of establishing new units in these states to take benefits of excise concessions.
- Summarized picture of impact of packages in these states is as follows:

State	No of Projects	Investment (Rs.Cr)	Employment (No)
J&K	253	1609	18856
Uttaranchal	2897	8630	105711
Himachal	3346	7019	119655

- Extend concessions to the existing units on addition of 25% to the existing employment.
- Extend central excise duty and income tax exemption for a period of 10 years from date of commencement of commercial production.
- Extend concessions to the new and existing units on their substantial expansion irrespective of the location in the region.
- Treat Power generation, Hospitals & Nursing homes, Tourism infrastructure as 'thrust industries'

- Uttaranchal has already developed a model of setting up of industrial clusters/ regions in Public Private Partnership (PPP) mode.
- Re-emergence of West Bengal as a major investment destination is another major disincentive for investment in NER.

7. Suggestions received for a new NEIP:

Following changes have been suggested in NEIP, 1997 by various stakeholders:

- Continue NEIP for another 10 years beyond 31.3.2007.

- Full refund of MODAT/CENVAT on the raw materials in addition to 100% excise duty exemption on final products.
- Extend concessions to service sector like IT/ ITES/ health care/ tourism/ biotechnology and construction industry.
- Exempt MAT, Fringe benefit tax, Dividend tax etc. so as to make NER tax free zone.
- Continue the Transport Subsidy Scheme for another 10 years beyond 31.3.2007
- Capital Investment Subsidy be provided @ 40% of investment in plant, machinery and

- technical civil work including building and warehouses with an upper limit of Rs.5 crore.
- Power projects in the range of 30 to 250 MW should also be eligible for CIS of 25%.
 - Power subsidy may be allowed @ 50% on purchase of power generating sets. Tariff rebate @ 25% of existing tariff subject to a maximum of Rs.50 lakh per annum may be allowed
 - Central Interest Subsidy of 3% both on working capital & term loan
 - Central government should provide 100% insurance premium for a period of 10 years
 - Exemption from service tax should be provided for 10 years and should be extended to service industries
 - Consider waiver of custom duty on imported plant and machinery
 - Streamline disbursement of subsidies within a time frame of 3 months from date of receipt of approved claims by NEDFi.
 - Do not treat incentives/subsidies as other income for IT purposes.
 - Transport Subsidy be allowed for export from location of unit to the Indian port of export and for imported raw materials from Indian port/Border Trade point to location of unit in the region.
 - Specify time frame for disbursement of subsidies. Pay interest @ 12% p.a. in the case of delay.
 - Uniformly define substantial expansion, modernization and diversification for all incentives/subsidies.
 - Relax funding pattern under the ongoing IIUS (Industrial Infrastructure Upgradation Scheme) by providing central assistance upto 90% against existing norm of 75%.
 - Provide financial assistance upto Rs.100 crore per cluster for development of integrated infrastructure in two locations in Assam and one location each in other N.E. States.
 - The Nodal agency for disbursement of subsidies should be the SIDC or Directorate of Industries instead of NEDFi
 - Polythene conforming to the norms of the MoEF should not be put in the Negative list
 - Special products of the NE such as Bamboo based products should be encouraged through a mechanism of price preference in purchases made by the Govt. and the public sector
 - The Monitoring Committee for implementation of NEIP should be chaired

by the Union Minister of Commerce & Industry or the Union Minister of DONER with the industry Ministers of NE states as its Members

- A proactive policy to promote the growth

8. Investment Hubs

Growth Centres & Industrial Infrastructure Development Schemes (IIDS) have been under implementation. However progress is extremely slow as shown below:

State	Growth Centre		IIDS	
	Nos. Proposed	Active Progress	Nos. Proposed	Active Progress
Assam	11	2	3	2
Arunachal	1	1	8*	-
Meghalaya	1	-	-	-
Manipur	1	-	1	-
Mizoram	1	-	1	-
Nagaland	4	1	-	-
Tripura	1	1	1	-
Total	20	5	11	2

of the large industries in the region be evolved

- Graded system of incentives to encourage investment in relatively backward areas of the NE region.
- Incur an expenditure of at least Rs.300 crore per year for extending benefits under the policy.
- Develop capital market by revitalizing Guwahati Stock Exchange by making it subsidiary of NSE & relax entry/listing norms for the eligible industries from Rs. 10 cr to Rs. 3 cr.

Even Food Parks, having a great promise, have not shown progress. There is, therefore, a need for urgent review of this situation. Transferring these Food Parks & growth centres in joint venture (with 74% ownership by private partner) would be a good idea.

Possible new major industrial hubs to be developed in the 11th Plan could be: (1) Assam - Guwahati, Tinsukhia, Tezpur, Bongaigaon, Silchar, Kokrajhar, (2) Nagaland - Tuli & Dimapur, (3) Manipur - Imphal & Moreh, (4) Sikkim - Jorethang, Rangpo, Singtam (5) Mizoram - Aizwal & Tlabung, (6) Meghalaya -

Byrnihat, Shillong, Mendipathar, Nongalbibra, Lumshnong (7) Tripura - Agartala, Dharamnagar & Kumarghat and (8) Arunachal Pradesh - Itanagar, Passighat & Tezu. Guwahati could be developed as an international business hub. Detailed study has, however, to be done to assess their long term viability, precise location, area, type of industries, infrastructure required, market potential for both domestic & international market, etc.

A list of possible investors, who are already present in NER, is given at Annex-I. An intensive follow up with them could be a good beginning.

9. Availability of Skilled Manpower

Vocational, technical and higher education provided by ITIs, Polytechnics and engineering colleges and quality higher education through State universities still lag behind the rest of the country (Annex-II).

For high grade and better paid employment, there is a need for bringing about a quantum change in the skilled manpower profile of the region by upgrading the existing ITIs & setting up more ITI's and Polytechnics (with modern trades & equipments), introducing relevant vocational courses at secondary level in schools and upgrading the universities and professional colleges so as to introduce high-skill employment oriented courses.

Private Training Institutes in nursing, para medical, civil aviation, sports, IT, technology & management, tourism should be given incentive such as land and buildings to create high skills locally.

10. Credit System:

The Committee on Financial Sector Plan for NE region set up by RBI has already submitted its report outlining the measures to be undertaken for

- o Expanding banking outreach
- o Simplification of banking system and procedures for increasing the depositor base
- o Land collateral substitutes
- o Currency management
- o Funds transfer and payment facilities
- o Revised human resource incentives

The report needs to be followed up in true spirit.

11. Strengthening of NEDFi, NERAMAC & NEHDC:

(a) NEDFi

- North Eastern Development Finance Corporation (NEDFi) is the nodal agency for disbursement of subsidies and is considered as a Special Purpose Vehicle (SPV) for development of N.E. Region. It

was registered in August 1995 with an authorized share capital of Rs. 500 crore. Paid up capital is Rs. 100 crores and Reserves & Surplus - Rs. 143 crores (as on 31/3/06). State-wise disbursement is given at Annex-III.

North-East is poised for high growth in the 11th Plan period in sectors like Power, Roads, Civic amenities in PPP. Growth is also expected in Healthcare, Tourism, Agro-Horticulture and post harvest management, Bamboo processing, Manpower Development and training, Medicinal

Performance Highlights of FY 2006:

Sanctions	Rs. 131 crores	284 projects: Up 47% (Rs. 89 crores in 2005)
Disbursements	Rs. 104 crores	269 projects: Up 100% (Rs. 52 crores in 2005)
Net Profit	Rs. 14 crores	Up 133% (Rs. 6 crores in 2005)
Net NPAs	7%	Down from 13% as on March 31, 2005

NEDFi Loan Products:

- (1) Rupee Term Loan (RTL) (for larger loans)
- (2) Working Capital Term Loan, Bridge Loan etc.
- (3) Women Entrepreneurs Development Scheme (WEDS)
- (4) Jute Enterprises Development Scheme (JEDS)
- (5) Scheme for NE Handloom & Handicrafts (SNEHH)
- (6) North East Entrepreneurs Development Scheme (NEEDS).

NEDFi's interest rates are among the lowest in the industry.

For WEDS, JEDS & SNEHH the effective interest rate is 7.35% p.a.; For NEEDS it is 8.76% p.a., for RTL from 8.5% to 12%.

NEDFi has proposed following for the 11th Plan:

- (i) **Rs. 500 crore interest free loan from GOI** (NEDFi received Rs.100 crore as interest free loan from GOI during the 10th Plan) since

and Aromatic Plants, Mineral based industries etc.

NEDFi, IL&FS, Punjab National Bank, LIC and GIC have recently created a Project Development Fund of Rs.30 crores, especially for identification, formulation and execution of infrastructure projects in the Region in PPP mode. Preliminary estimates by IL&FS indicate that in Assam & Sikkim, Power Projects with total investment of Rs.2000 crores and with credit requirement of up to Rs.1400 crores are expected to come in the 11th Plan Period.

(ii) Income Tax Exemption for NEDFi:

NEDFi was granted exemption from income tax for a period of ten years, which expired on March 31, 2005. Subsequently partial relief has been granted wherein NEDFi is required to progressively pay income tax from 20% of its taxable income in 2005-06 to 100% in 2009-

10. NEDFi has renewed its request for a 100% income tax exemption for a period of another 10 years. Annual tax liability during this period is around Rs. 14 crores, which can be effectively utilized for the development of the region.

(b) NERAMAC & NEHHDC - are virtually defunct and need to be revived given the criticality of their mandate. NERAMAC, however, need to be transferred to private ownership for better management & outcomes. As NEHHDC has been making operational level losses since its inception and each state of NE (except Arunachal) has its own Handloom & Handicraft Corporation, it should either be closed down or transferred to private ownership.

12. Recommendations:

Though required presently, deepening of subsidy & concessions and extension of its time period are unlikely to provide long-term incentive to genuine investors. The following action is suggested:

- Implement suggestions at para 7 to the extent feasible.
- Develop infrastructure and create other enabling conditions in N.E. Region, which seem to have prime deterring effect on investment in the region (Refer subsequent chapters).
- Geographical isolation further demands invigoration of border trade (Refer Chapter on Border Trade).
- Implement the Report of the Committee on Financial Sector Plan for NER set up by RBI in true spirit (Para 10 of Industry Chapter).
- Provide better incentives under the NEIP, 2007, than those being offered under the industrial policies for the states of Uttaranchal/Himachal Pradesh/J&K.
- Provide differentiated package even among states within NER as most of the investment has taken place in two states of Assam and Meghalaya.
- Promote industrial development based on natural resources of the region like hydro power, gas, bamboo, horticulture rather than investment in Pan Masala, Gutka.
- Enhance the present debt-equity ratio from 60:40 to 80:20 so as to reduce initial investment by the investor.
- States of the Region, under the aegis of NEC, should come together for evolving a comprehensive regional industrial policy so as to make NER a single Economic Unit through removal of internal barriers, uniform taxation regime, promoting NE brand equity etc.

- The regional policy should complement and supplement GOI NE Industrial Policy. These should include quick and easy access to land and credit, availability of quality power and water, transportation networks, warehousing, marketing networks etc. The regional policy should be applicable for 10 to 15 years, to allow for longer gestation period for setting up industries in the Region.
- Strengthen public sector institutions, such as NERAMAC, NEHHDC and NEDFi, transfer in joint ventures (with majority private ownership) and make these pro-active to provide professional guidance and support to entrepreneurs.
- Accelerate the activities of various commodity boards for Tea, Coffee, Spices etc. in the Region.
- To enable NEDFi to play a substantial role in the development of NER, sanction Rs.400 crores during the 11th Plan Period as Interest Free Loan conditional upon a good perspective business plan covering all NE states.
- Transfer Growth Centres & IIDCs under implementation in joint venture with private ownership. Set up more Industrial Centre (hubs) after doing feasibility study.
- Adopt Mission approach for specific areas of industrial growth such as bamboo processing, horticulture produce processing and for use of medicinal, aromatic resources and tourism.
- Pursue growth of IT sector vigorously and develop IT parks to utilize the literate and educated manpower. This industry is not dependent on transportation networks and raw material supply.
- Incentivise service sectors, Power generation, Bio technology, Tourism related activities, Hospital and Nursing homes and Vocational training institute.
- Since handloom industry is traditional to the Region, evolve a special policy for development of the handloom sector with linkages with the contemporary markets, design, etc. especially for exports.
- Open new ITIs and strengthen the existing with new trade, better faculty & equipments to provide for market - driven high skills. IIT Guwahati could be mentor & guide for the purpose. Create at least one center of excellence in each state through PPP model.
- Promote vigorously NER as an attractive destination for investment through persistent image building & holding of NE Business Summits.

Establish a major Exhibition and Emporia complex at Guwahati to display industrial products of the Region. The Trade Centre being set up by ITPO at Guwahati may integrate the above activity. Operation & maintenance of this Centre could be under PPP mode along with the local Industry Association.

- Set up some medium and large units through CPUs for promoting investor confidence. Assam Gas Cracker Project & Tulli Paper Plant should be operationalised in a time bound manner.
- Revive or close down the existing airli PSUs.

A. Cement and Cement based:

- (a) Cement Manufacturing Company
- (b) Barak valley Cement
- (c) H. M. Cements
- (d) Vinay cements
- (e) Meghalaya Cements Ltd.
- (f) Virgo Cements

B) Ferro Alloys:

- (a) Brahmaputra steels
- (b) Sree Sanyjee Ispat
- (c) Manthan Smelters
- (d) Meghalaya carbide and chemicals
- (e) Jaiswal Alloys

C) Tourism Services

- (a) Jungle Travels Private Ltd
- (b) Blue Hills travels
- (c) Green Valley Travels
- (d) Mr. Hemen Baruah, on tea and heritage tourism
- (e) Mr. Chiranjit Chaliha on tea tourism

D) Food Processing and Medicinal and Aromatics:

- (a) SRD Nutrients
- (b) Repose Foods limited
- (c) North East Pure Drinks
- (d) Anderson Biotech, Meghalaya
- (e) Patkai Herbs, Guwahati
- (f) Nezone Foods

E) Machineries and Equipments

- (a) Buildworth Pvt Ltd
- (b) Mech Technik
- (c) R.K. More, Torsa Machines
- (d) Techno Builders
- (e) T&I. Ltd, Tezpur

F) Others:

- (a) Godrej Consumer Products
- (b) Premier Cryogenic
- (c) Emami Limited
- (d) Dharampal Satyapal Group
- (e) Assam Granites
- (f) Assam Carbon Group
- (g) GraceiNET Solutions, IT and ITES
- (h) Third Eye Infosys

Annexure-II

State	Prim+UP	Sec+HS	Arts/Sc Colleges	Engg.	Medical	Univer- sities	Poly- technics	III
Arunachal Pradesh	1697	204	8	1	0	1	1	2
Assam	37749	4736	309	3*	3	5	8	23
Manipur	3346	687	58	1	1	2	1	6
Meghalaya	6890	641	44	0	0	1	1	9
Mizoram	2101	388	27	0	0	1	2	1
Nagaland	1779	279	35	0	0	1	2	3
Sikkim	626	138	2	1	1	1	2	1
Tripura	2489	643	14	1	1	1	1	4
Total NER	56677	7716	497	6	6	13	18	49

* excludes IIT, Guwahati

Annexure-III

STATEWISE DISBURSEMENTS (Rs. in lakh)

State	96- 97	97- 98	98- 99	99- 00	00- 01	01- 02	02- 03	03- 04	04- 05	05- 06	Cum
Arunachal	0	9	24	150	206	397	246	341	778	610	2761
Assam	615	227	1062	932	3360	2472	2170	2964	2285	5342	21429
Manipur	0	39	31	153	285	152	68	70	105	50	953
Meghalaya	0	-	4	62	618	1467	2404	1349	1542	3199	10645
Mizoram	0	-	25	30	60	192	87	96	85	70	645
Nagaland	0	80	34	41	323	259	97	175	152	32	1193
Sikkim	0	-	-	-	-	-	-	14	88	128	230
Tripura	0	0	37	95	194	140	38	200	200	1000	1904
Cumulative	615	355	1217	1463	5046	5079	5110	5209	5235	10431	39760

BORDER TRADE

Border Trade has special significance for the economies of the NE States due to their geographic isolation from the mainland and traditional proximity to the markets of neighbouring countries and South East Asia. NER share less than 1% of its border with the mainland. SAFTA has come into effect from 1st January 2006 and is of special significance since Bangladesh, Nepal and Myanmar are involved. The BIMSTEC - FTA which was expected to be concluded by 1st July 2006 has been delayed. The India - ASEAN FTA is scheduled to come into effect from 1st January 2007. This is a part of the renewed focus of Govt. of India to forge closer commercial and economic links with the markets in the South East Asian economies and a part of its 'Look East Policy'. The NE States already have a large volume of informal trade (apart from significant formal trade) with

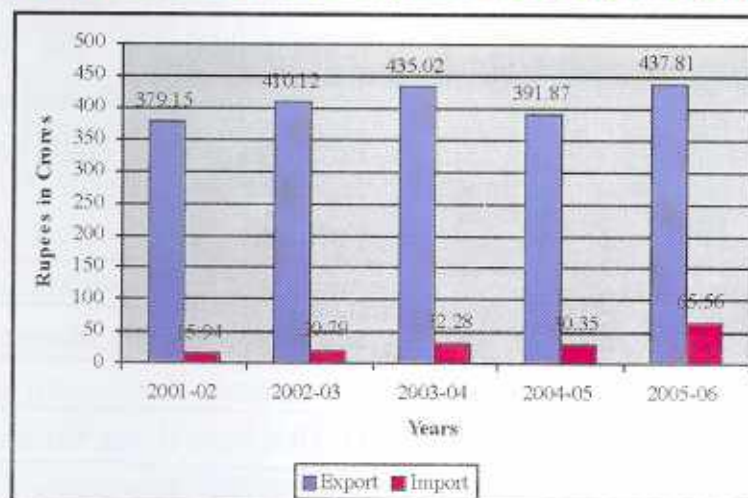
Myanmar and Bangladesh. Bangladesh, however, is presently unwilling to expand trade with India and is not permitting improvement of road/rail / IWT access.

Free trade, various road & rail projects and good access to ports in Bangladesh and Myanmar would reduce, to a great extent, the problems of the NER being land locked. The proposed North-East Industrial Policy, 2006 could also accelerate investment in NER and consequently international trade.

2. Status of imports & exports from NER

Total exports and imports through the region has hovered around Rs 400 crore for the last few years despite trade agreements. Incidentally, IITF had estimated informal trade at Rs.2000 Crore way back in 1995.

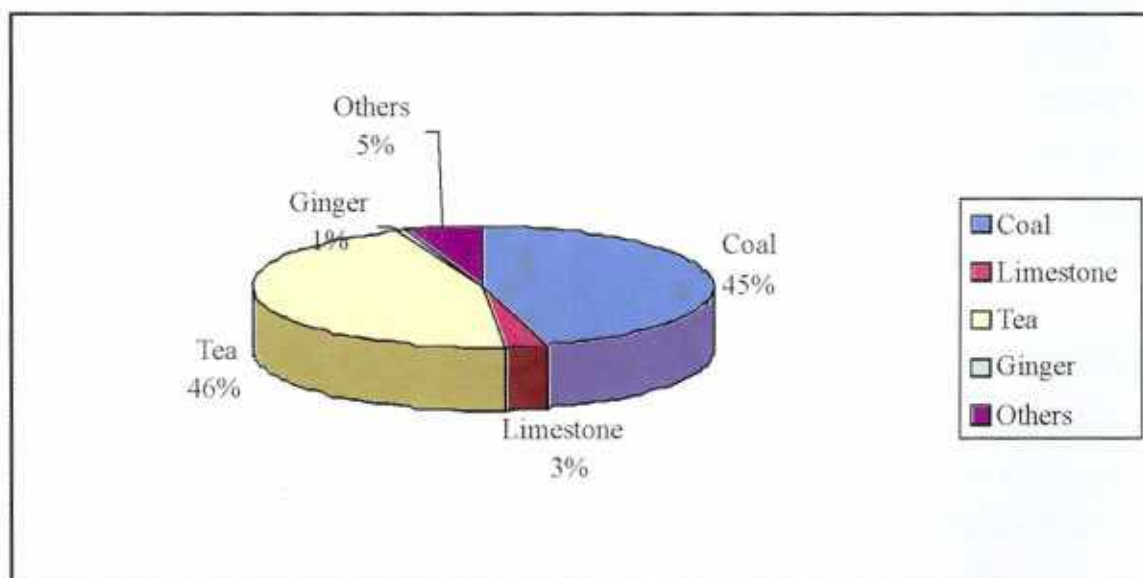
EXPORT/IMPORT FROM/TO NER IN THE LAST FIVE YEARS (in Rs. Crore)



About 91 % of exports come from tea and coal. The region largely exports primary products like boulder stone, limestone, fruits etc. The contribution of manufactured good to the export basket is negligible.

land with high agro- economic potential perennial inland water system, oil, tea, hydro carbon and huge hydro-power potential. Major items of trade with the neighbouring countries may be seen at Annexure I.

MAJOR ITEMS OF EXPORT



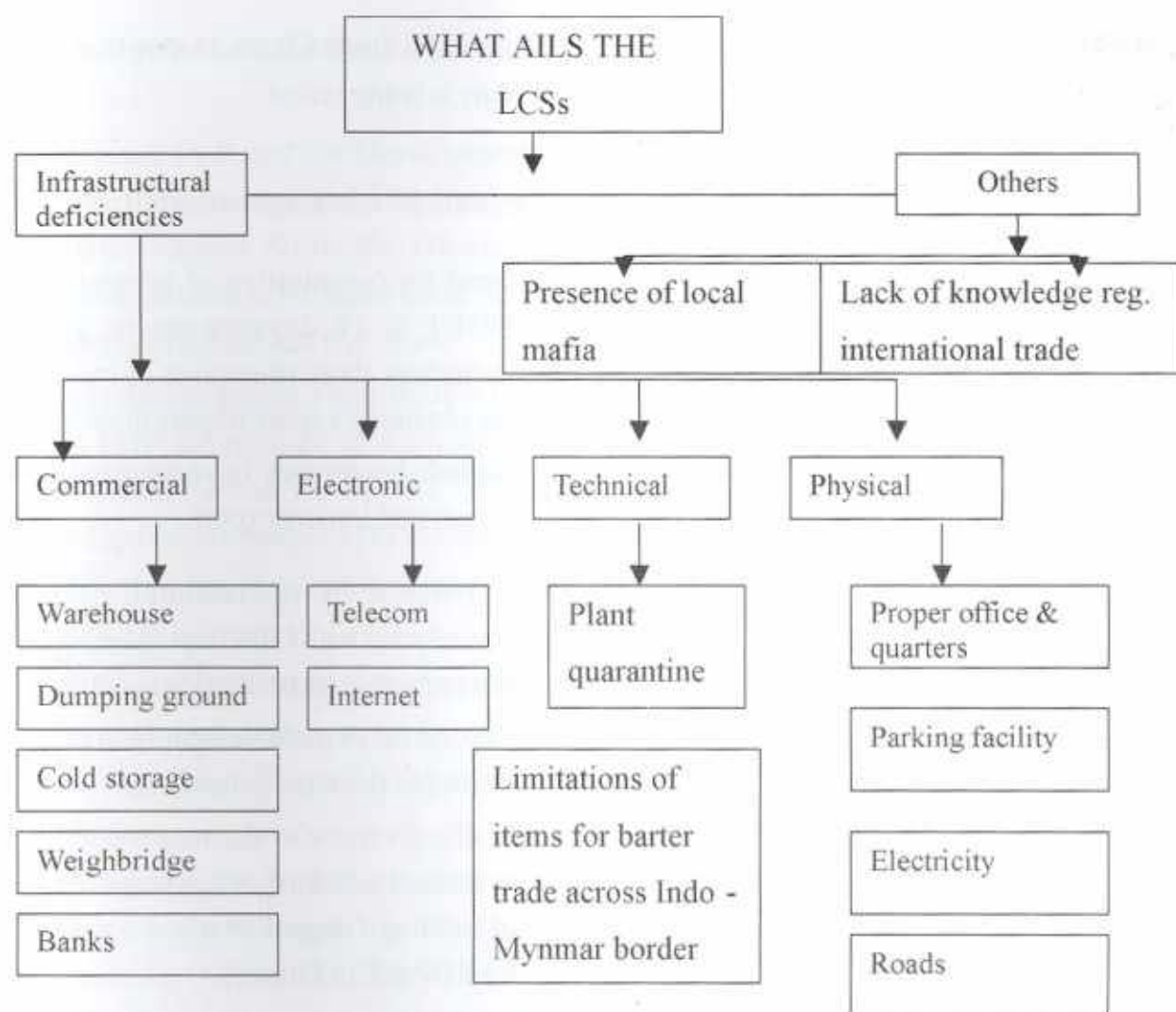
Export of items produced in other parts of the country through NER like, motor parts, umbrellas, printed garments etc., are also not very significant. About 50% of imports in to the NER consist of manufactured products and processed food items like fish, dry ginger, yellow peas, cement, multi-wall paper sacks, laminated poly bags, machinery equipment and parts, mustard, soya and palmolein oil etc.

NER has large potential for increasing international trade because of its rich mineral deposits, forest resources, fertile stretches of

3. Land Custom Stations:

Operational status of various LCS is given Annexure II&III. The Ministry of Commerce responsible for the development and improvement of infrastructure at these Stations. Problems of LCSs could be depicted as below

Following twelve stations that have been prioritized for development of infrastructure are as follows: Agartala, Borsorah, Dawki, Demag, Ghasuapara, Karimaganj steamer ghat, Mor, Old Raghana Bazar, Srimantapur, Sutarkhan, Zokhawthar, Sherathang. Of which five bore



towns namely Moreh, Sutarkhandi, Dawki, Demagiri & Agartala has been given priority for development of export infrastructure. Some new LCSs have been proposed, such as Bleting & Bumla in Arunachal, Behiang & Kon Kenthana in Manipur, Kuliang & Maheshkhola in Meghalaya, Avangkhu & Pangsha in Nagaland and Sabroom in Tripura.

4. ICD Guwahati (Amingaon) :

ICD at Amingaon is the only ICD serving entire NER. ICD helps the major tea producers in

directly exporting tea and has the benefit of less handling, less damage, better quality, faster realization of export and trouble free service.

However, lack of imports through this ICD entails major cost disadvantages. Every ISO container has to be brought back empty to the ICD from Kolkata/Haldia. Every empty container needs to be sanitized and certified as to its fitness for carrying tea, the facility not available at ICD Amingaon. This necessarily involves additional cost. The transport subsidy was enhanced from Re. 1 per kg to Rs. 1.50 per Kg for the year 2004-05.

5. Nathu La-an update:

The Agreement on expansion of border trade through Nathu La came in to effect from 01.07.2006. It was expected that trade will flourish. However, on the ground it has not taken up due to following reasons:

- Limited issuance of trade permits
- Low volume of trade (up to Rs.25, 000 in a single day) because of non-possession of PAN number.
- The border trade can be undertaken only by local traders who are to be given passes by the Govt. of Sikkim. As they are small traders with limited trade with other parts of the country, the trade volume is low.
- Very short operational period (June-September)
- Restricted list of tradable items which mainly consist of traditional goods (current list includes 29 exportable item and 15 importable items).
- Poor road connectivity-not capable of high volume trade, which adds to cost.
- On the China side, the custom duty is to be paid right on the border unlike the Indian side where the duty is to be paid in trademart at the time of sale. This limits the movements of larger consignments because where duty is paid and the goods are not sold in Chinese trademart, refund of customs duty gets involved.
- There is an old notification for exemption of custom duty on export of certain

products from China. In practice, custom duty is being levied.

Suggestions for improvement:

- Need for organization of programmes by DGFT & IT department to generate awareness about exemption of Income Tax for obtaining export-import licenses.
- Nathula border may be recognized as LCS for normal import/export.
- Extension of operational period in consultation with China and development of infrastructure on both sides accordingly.
- Expand list of tradable items and revise the list as per the requirement.
- Traffic diversion to alternate routes leading to Nathu La and expeditious double laning of existing Gangtok-Nathu La road under SARDP-NE of Phase A.
- Export/import from Sikkim with standard I.E. Code be allowed for high value consignments. Persuade China to allow movement of goods from zero point to trademart on basis of bond and duty may be changed only if there is sale in trademart.

6. Incentives for boosting Trade and Commerce in NER :

An Empowered Committee functions under the Chairmanship of the Commerce Secretary to monitor implementation of measures aimed at development of trade and exports from the NER.

The following measures have been taken in NE also:

- (i) Assistance to States for Development of Export Infrastructure and allied activities (ASIDE) scheme. So far Rs. 118.41 crore has been released to NE states under ASIDE Scheme during the last five years.
- (ii) Export Development Fund (EDF): Funds from EDF are released to Agricultural & Processed Food Products Export Development Authority (APEDA). So far, Rs 42.57 crore has been released to APEDA under EDF scheme.
- (iii) The Transport Subsidy Scheme provides transport assistance to exporters for exporting about 15 notified Horticulture products.
- (iv) Four Agri Export Zones have been set up:
(a) Tripura -for Pineapple. (b) Sikkim - for floriculture, Orchids and Cherry Pepper (c) Sikkim -for ginger. (e) Assam- for fresh & processed ginger.

The impact of these schemes has, however, been at best marginal.

7. Special problems of trade with Myanmar :

- (i) Heavy presence of militants & stringent check by security forces hinder movement of goods on NH 39 & 53 leading to Moreh/ Zokhawthar.
- (ii) Official exchange rate of Rupee & kyat is grossly distorted (1 kyat = Rs. 7 vs kyat

22 = Rs. 1) resulting in lack of Letter of Credit facilities and the only viable option is barter trade.

- (iii) Limited tradable items
- (iv) Unilateral change in import/export policy brought by Myanmar to disallow foreign companies from trading.
- (v) Export-import licenses have not been issued to any new foreign company from March 2002 onwards.
- (vi) UN sanctions have limiting effect on transaction arrangements.

8. Recommendation for promotion of border trade:

Undertake following rail/road/air/IWT projects based on detailed project formulations and cost benefit analysis:

A. Road Network:

- Improvement and Construction of all weather Highway, RCC Bridges etc, leading to 12 major Land Customs Stations (LCSs).
- Opening of Stillwell Road linking Central Myanmar and China on priority basis.
- Re-Opening of Karimganj-Sylhet-Dhaka Road for Transportation.
- Extension of Amguri-Mokochung-Tuensang Road linking Myanmar.
- Extension of Sibsagar, Sonari-Nemtola Road from Assam-Nagaland border to Lungwa in Myanmar.

- Construction of road from Indo-Myanmar border to NH-54 at Nalkawn (Mizoram) to provide Kaladan multi-modal transport.
- Up-gradation of N.H.39 and 53 connecting Indo-Myanmar Border Via Dimapur & Silchar.
- Up gradation of N.H.40 and 62 & 62 E connecting Indo-Bangladesh Border Via Dawki & Gasuapara LCSs. Improvement of road leading to Borsora LCS in Meghalaya.
- Improvement of road stretch from NH 44 to Agartala LCS.
- Connection with North East to Trans Asian Highways.
- Construction on priority basis 1300 KM long trilateral Highway connecting Moreh (India), Bagan (Myanmar) & Maesot (Thailand).
- Bus service between Guwahati-Imphal-Mandley, Guwahati-Dhaka via Shillong and Guwahati-Tura-Dhaka to facilitate movement of the business community.

B. Railways:

- Restore Mohisashan (Assam, India)-Shahbazpur (Bangladesh) railway traffic to facilitate export of bulk mineral (coal, limestone), food items and agro-horticulture based products from NER.
- Double track the Railway line from new Jalpaiguri to Tinsukia via Dimapur.
- Extend ICD facility at Silchar, Moreh and Dimapur.

- Connect NE with Trans Asian Railways for faster movement of goods.

C. Airways:

- Create an air travel circuit between North East and Bhutan, Nepal, Bangladesh, Myanmar, China, Thailand, Singapore to increase Export and Tourism from the region.
- Provide an Air Cargo Complex at LG Airport, Guwahati to cater to Export and Import of goods,

D. Water-Ways:

- Open up and improve Inland water-ways with Bangladesh and Myanmar through a number of river port existing in North East.
- Declare Jogighopa, Moreh, Dawki, Ashuganj and Karimganj as ports of call.
- Government of Bangladesh/ Myanmar provide access to Chittagong/ Mandalay Port for exports/import from and to the NER. This would help neighbour earn substantial revenue by charging a fee for the use of Roads/ River.

E. Infrastructure at LCSs :

- Construct Integrated Export Complex including Customs Office, Immigration, Banking, Clearing and Forwarding Agent buildings, Truck parking bay, Warehouse, Cold Storage Facilities, Post Office

Telephone Exchange, Shopping Centers, BSF Complex, Police Outpost, Electronic Weigh Bridges, Electricity, Potable Drinking Water, Health Facility etc at all the 12 notified LCSs.

- Develop Border Town and Trade Centre at major LCSs of NER.
- Open more border trading points with adequate infrastructural facilities and upgrading the infrastructure at non-functional LCS of the region.
- Create more border haats and regularize these haats.

F. Quality Control Facility:

- Set up inspection house, Testing facility for Phyto-Sanitary certificate, Plant Quarantine etc at major LCSs to boost export of agricultural/horticultural products.

G. Banking:

- Create adequate Banking infrastructure for both International and Border trade.
- Banks functioning in NER should have correspondent arrangements with Banks in the neighboring countries. At present this correspondent relationship are restricted to the Banks functioning in Kolkata.
- Install high value currency chests at major towns near LCSs.

- Regularize & institutionalize Letter of Credit (L/C) arrangement between the Banks of India and Myanmar for smooth and enhanced border trade through Moreh & Zokhawthar.
- Reduce Letter of Credit advising charge from Rs.500 to Rs.200 considering LoC value is less than US \$ 20,000.

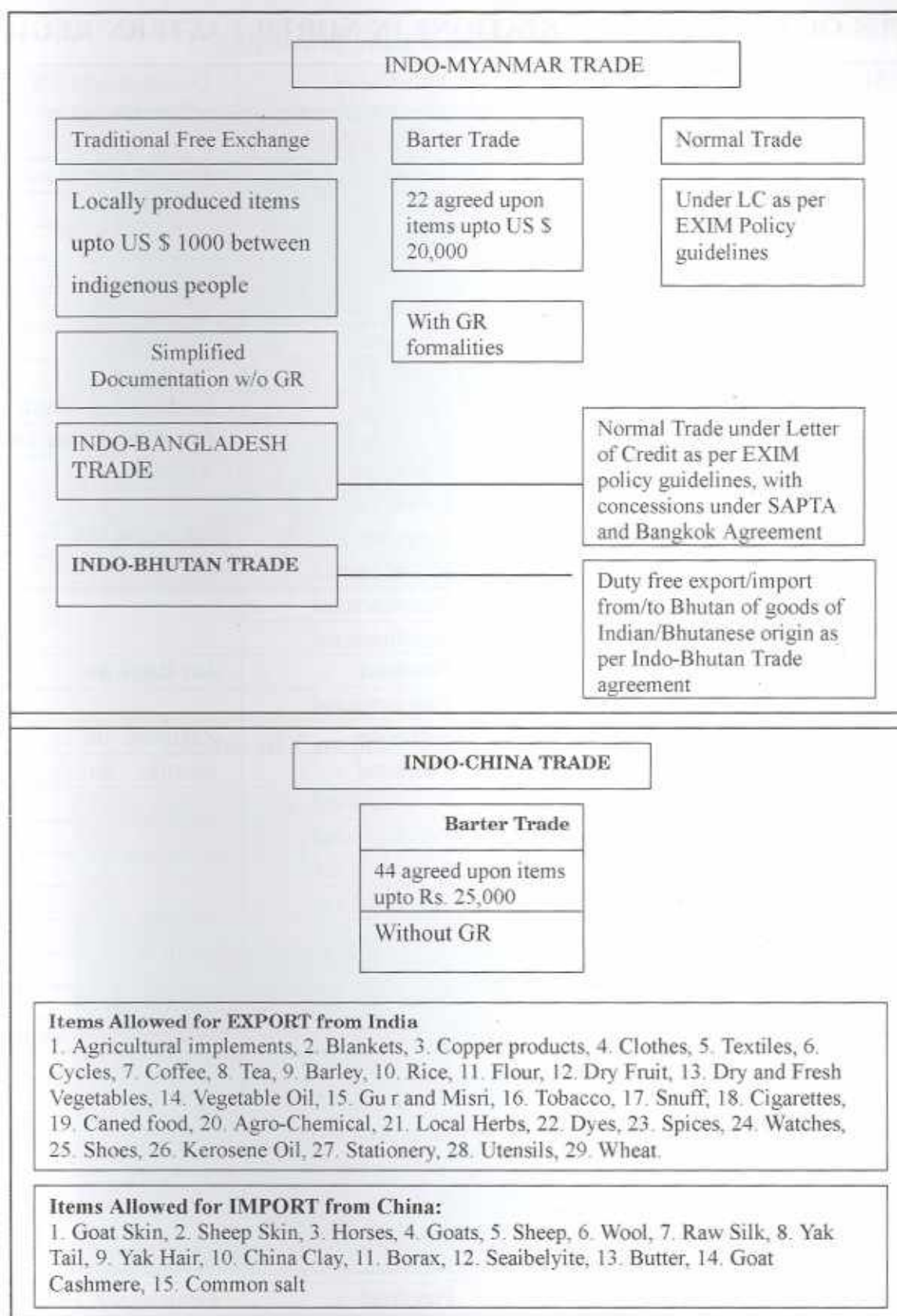
H. Policy & Miscellaneous:

- Pursue Bangladesh to reduce Tariffs North East exports to Bangladesh suffer High Tariff Barriers since the Customs duty structure in Bangladesh includes Value Added Tax, Advance Income Tax and Infrastructure Development Charge in addition to Basic Customs Duty.
- Pursue neighbouring countries for duty free import / export.
- Pursue Bangladesh to have corresponding LCS to Demagiri LCS on Mizoram side.
- **Transport Subsidy:** Consider Freight Subsidy @50% for all items of export through L.C.S / Airport or nearest port of call since the exporters of the region have to pay double freight charge, as there is no or little import through various L.C.S. Subsidy eligibility could be verified against transport bills & custom documents.
- **Consulate Office:** persuade neighbouring countries to open their visa offices in the North East

- Ensure more exchange of trade delegations and Buyer-seller meets, Exhibition of goods at regular intervals with neighbouring countries.
- North East Council (NEC): should play a major role in the creation of infrastructure for development of export from the region and co-ordinate export promotion efforts in this region with various Union Ministries.
- NE states should bring exports in their development agenda and improve law & order at LCS & enroute.
- Ministry of Commerce to take immediate steps to formulate effective North East Exim Policy to provide incentive for export.
- Set up a separate Zonal Joint Director General of Foreign Trade- cum- Development commissioner office in Guwahati with the jurisdiction over entire NE states including Sikkim.
- Review schemes for export promotion (ASIDE, EDF, MDI/MAI, EPIP, STP, AEZ, SEZ) and make these effective. Create SEZs in NER in a PPP mode.
- Develop brand image for special products of NE for export enhancement.
- Create & constantly update interactive website for NER to facilitate border trade.
- Set up a branch of Indian Institute of Foreign Trade in North East for the development of professional manpower and creation of entrepreneurship in Foreign Trade.

I. Measures to reduce informal trade

- Introduce a special package of incentives like DEPB entitlement at enhanced rate of additional 1%
- Have a special scheme on the line of duty free licensing scheme at 5 % of F.O.B value of exports
- Expand the list of tradable goods and commodities under barter mechanism.
- Permit common market trade between India and Bangladesh at selected points for locally produced surplus items.
- Identify locally produced surplus items with some certification of rules of origin and accordingly reduce custom duty to zero.
- Waive off non-tariff barriers like requirement of phyto-sanitary certification for locally produced goods.



STATUS OF LAND CUSTOM STATIONS IN NORTH EASTERN REGIONS

Sl. No.	State	Name of The LCS/ Other export point	Functional/ Non-functional Country	Counterpart LCS of Neighbouring
1	Meghalaya	Dawki	Functional	Tamabil, Bangladesh
2	Meghalaya	Bholaganj	Functional	Chattak, do
3	Meghalaya	Borsora	Functional	Borsora, do
4	Meghalaya	Shella Bazaar	Functional	Chatak, do
5	Meghalaya	Rynku	Non-functional	
6	Meghalaya	Baghmara	Functional	Bijoypur, do
7	Meghalaya	Dalu	Functional	Nakugoan, do
8	Meghalaya	Ghasuapara	Functional	Karaituli, GobraKura, do
9	Meghalaya	Mahendraganj	Functional	DhanuaKamalpur, Do
10	Tripura	Agartala	Functional	Akhaura, do
11	Tripura	Sabroom	Denotified	
12	Tripura	Srimantapur	Functional	Bibirbazar, do
13	Tripura	Muhurighat	Non-functional	
14	Tripura	Khowaighat	Non-functional	
15	Tripura	Dholaighat	Non-functional	
16	Tripura	Old Raghna Bazar	Functional	Juri-Batuli do
17	Tripura	Manu	Non-functional	
18	Assam	Karimaganj ferry & S.G.	Functional	Zakiganj, do
19	Assam	Sutarkandi	Functional	Sheola, do
20	Assam	Mahisasan R. STN.	Non-functional	
21	Assam	Silchar RMS Office	Non-functional	
22	Assam	Dhubri Steamer ghat	Non-functional	
23	Assam	Golakganj	Non-functional	
24	Assam	Guwahati Steamerghat	Functional	
25	Assam	Mankachar	Functional	
26	Assam	Hattisar	Functional	Bhutan
27	Assam	Darranga	Functional	Samdrup, Jongkhar, Bhut
28	Assam	Ultapani	Non-functional	
29	Assam	ICD Amingoan	Functional	
30	Assam	IGBI Airport.	Functional	
31	Arunachal	Nampong	Non-functional	
32	Mizoram	Demagiri	Non-functional	
33	Mizoram	Champhai	Non-functional	
34	Manipur	Moreh	Functional	Tamu, Myanmar
35	Sikkim	Sherathang	Functional	Renqinggang, Tibet

Condition of road leading to Borsora LCS



Status of Custom check point at Borsora LCS



HIGHWAYS

Road Network:

Average density of roads in NER is 66.17 kms per 100 sq. km, as against 75 kms at all India level. Five states (Arunachal Pradesh, Meghalaya, Mizoram, Sikkim and Manipur) have however very low road density in relation to area, than the national average (Annexure-I). The total length of National Highways (NHs) in NER is 6880km (Annexure-II) which is more than 10% of the length of NHs in the country (65569km).

awarded for construction leading to poor quality and delay in project completion.

2. NEC Perspective Plan:

North Eastern Council (NEC) has prepared a twenty year (2001-2021) Transport Perspective Plan for development of NER (excluding Sikkim). The study has recommended a four-phase programme for improving/widening of existing road network as follows:

Phase	Length (km)	Category of road	Period	Cost (Rs.million)
Phase-I	582.8	NH	Up to 2007	62,640
Phase-II	519.7	NH, MDR, SH	2007 to 2012	92,873
Phase-III	848.35	SH, MDR, NH	2012 to 2017	26,232
Phase-IV	1009.6	NH, SH, MDR	2017 to 2021	13,540
Total	2960.45	NH, SH, MDR	20 Years	195,285

The network is, however, predominantly characterized by unsurfaced roads, insufficient coverage, weak pavement, poor geometrics, poor riding quality, submersible stretches, weak & dilapidated bridges with large preponderance of semi permanent bridges.

There is lack of availability and capacity of local contracting and consulting services, within the region. As a result small stretches of road are

3. Special Accelerated Road Development Programme for North East (SARDP-NE):

(i) SARDP-NE covering improvements / upgradation of 7616 km of roads has been initiated with the following objectives:

- To connect all state capitals with improved/ upgraded National Highways
- To provide connectivity to all the 85 District

Headquarters (DH). Since 23 DH are already connected and two are included in NEC plan, the remaining 60 DH to be connected to 2-lane NH through improved state roads.

- To improve connectivity to neighbouring countries
- To provide road connectivity to backward and remote area of NE region.
- To improve some of the important roads of strategic importance.

(ii) The programme is to be implemented in two phases. Phase 'A' comprising of 1310 km, approved on 22.09.2005 for implementation at an investment of Rs.4618 crore, is to be completed by 2008-09 (Details at Annexure-III). Phase A mainly aims to connect state capitals, industrial hubs and high traffic corridors with East-West corridor. Length of 686 km is proposed to be added under modified Phase 'A' at cost of Rs.1645 crore. Arunachal Pradesh, having 1/3rd of geographical area of NER and the lowest density of roads, seems to have been neglected even in modified Phase A and intended to be compensated in Phase B (Map 'A'). *Imp.*

(iii) Modified Phase 'B' comprising of 6309 km roads have been approved for DPR preparation (Details at Annexure-IV). Phase B mainly aims to connect district head quarters with highways and improved state roads. The DPRs are under preparation by BRO, State PWDs and NHAI. The

time frame, sources of funding for the programme are yet to be approved. The entire programme may cost about Rs.20,000 crore at 2005 price level.

4. Other roads of urgent importance:

(a) Arunachal Pradesh has the lowest density of roads even among the NE states. It shares over 1000 km of sensitive border with China and Myanmar and has vast potential for hydro power generation. For going from one town to another in Arunachal, one has to come down to a road in Assam and then go up. Assam stretch is subject to insurgency, blockades and not well maintained. Moreover, Arunachal spends Rs.70-100 crores/year for dropping food etc. Four districts do not have all-weather roads and most (30) of the administrative circles are unconnected.

Considering these, trans Arunachal Highway (about 1254 km) network needs to be developed connecting Tawang/ Balipara (passing through Bomdila-Nichipu-Seppa-Sagali-Ziro-Daporijo-Along-Pasighat-Roing-Tezu-Mahadevpur-Namchik-Changlang-Khonsa-Kanubari) to NH 37 at Sibsagar (Map'B'). This highway would connect (a) majority of Distt.HQs, (b) areas of population concentration and agricultural/ horticultural production; (c) major hydro projects and river basins etc. This proposal

involves only upgradation of the existing network of ODR/MDR to double lane NH standards and construction of bridges (Details at Annexure-V). Infact stretches between Passighat & Mahadevpur is already a NH and stretches of Tawang-Balipara, Nichipu-Seppa, Daporizo-Along, Namchik-Changlang are covered under SARDP-NE (Phase-B).

(b) Manipur: (i) Complete NH 150 between Churachandpur to Tipaimukh. BRO has completed 40 km stretch and taken up another 20 kms. The rest should also be taken up by BRO (202 km). (ii) Link NH-53 and NH-150 by connecting Thaitu on NH-150 to Jiribam on NH-53. This will provide alternative supply line to Manipur. The existing supply lines are perpetually burdened by insurgency, extortion and blockades.

5. PPP in National Highways:

National Highways stretches aggregating to 1849 km have been identified for 4-laning on BOT basis. As per GOI policy, viability gap grant up to 40 % of the project cost is permissible for PPP. Since in NER, the construction cost is high due to hilly terrain and low traffic levels, the results of feasibility studies in several cases have revealed that projects would not be viable with 40% grant. It is, therefore, proposed to permit more than 40% of the project cost to fund viability gap, on case-to-case basis.

6. Major Bridges:

There has been consistent demand to provide increased connectivity between the North and South of Assam by constructing bridges on river Brahmaputra at various locations such as between (a) North and south Guwahati, (b) Dhola & sadia, (c) Jorhat and north Lakhimpur via Majuli, (d) Dhubri to Phulbari in Meghalaya. Construction of bridges across river Brahmaputra requires huge investment. Moreover, (b) to (d) are not on the NH and need to be taken up outside NH programme.

To provide increased connectivity between North & South Guwahati, NHAI has already prepared DPR for construction of an additional 3-lane road bridge at about 40m down stream side of the existing rail-cum-road bridge at Saraighat (Guwahati) on NH-31 as part of the East West corridor. The corridor is to be completed by 2008.

7. Proposed ADB funded Roads Project:

The North Eastern State Road Projects (NESRP) of ADB proposes to finance the upgradation and reconstruction of approximately 1203.6 km of state road in eight NE states (Details at Annexure-VI). The estimated cost of the project is US\$ 430 million. ADB will contribute 70 % amounting to US\$ 300 million (Details at Annexure-VII). Incidentally, ADB has found the

average funding level for state roads excluding NH (US\$3,400-10,900/km) in NER to be at par with that for 4 lane roads in Australia or Canada, which indicates inappropriate way of spending money.

The proposed works will also include (a) reconstruction/construction of 4550 meters of bridging (b) construction of 4700 meters of causeway and (c) construction of a number of drainage structures (floodways, etc). The selection criteria for prioritization includes level of traffic, road network connectivity, possibility of future diversion of traffic, connectivity to major traffic generator & other arterial roads.

The institutional development initiative will include reforming the PWDs through expansion of PWD responsibilities to include full road management and planning, modernizing their processes & procedures, developing a training and skills development programme, making road safety a key consideration.

8. Maintenance of Roads:

It is essential to focus on the important activity of maintenance of roads to preserve the assets already created in NER. Keeping this in view, the 12th Finance Commission has allocated Rs.780.96 crore for road maintenance in NER during 2006-10. Perhaps the amount allocated for

the development of roads should include renovation/ upgradation also. Sufficient provision made for maintenance of roads in order to ensure optimal utilization of assets created.

9. Recommendations:

- ✓ Complete Modified Phase A of SARDP-NE as planned.
- ✓ Take up the Trans Arunachal Highway (about 1254 km), as mentioned in para 4 of the chapter, urgently and complete on top priority through BRO.
- Take up the road links in Manipur, as mentioned in para 4 of the chapter, on top priority.
- ✓ Complete Phase B selectively based on resources availability in the 11th plan.
- ✓ Construct a bridge (4 km) at Sadia/Dholaghat point to connect NH52& NH 37 for enhancing accessibility to upper Assam, Dibang HEP, and foothills of Arunachal and support strategic border areas in Walong & Anini sectors of Arunachal.
- Encourage PPP for road development with increased viability gap grant.
- Construct bridges between Jorhat and north Lakhimpur & between Dhubri & Phulbari

over Brahmaputra in PPP mode considering its importance and cost implication.

- ✓• Take a policy decision that MORTH will take up only Highways, NEC only MDR roads and NLCPR only ODR roads, to avoid overlap of efforts.
- ✓• Build capacity of PWD's staff in road engineering & management, planning for development and proper maintenance of road network. Strengthen road management & maintenance cell in each state.
- ✓• Develop benchmark indicators for quality control of roads and install an inbuilt system of monitoring through random checks and field inspection.

✓• Address the lack of availability and capacity of local contracting and consulting services in NER. Provide incentives to improve capacity of local contracting with clause for adherence to quality control norms.

✓• Ensure quality contracting through hiring of professional firm to improve quality and for timely completion of the project.

✓• Establish a separate unit for road research at IIT, Guwahati or a branch of Central Road Research Institute (CRRI) in the NER to provide technological support to road and bridge construction activities in NER given its unique climate, geography and geology. Introduce new and modern technology in road construction & maintenance work.

Annexure-I

State	NH	SH	Other PWD roads	Others*	Urban roads	Project roads	Total (kms)	Road Length	
								Per 100 sq.km	Per 1 lakh population
Arunachal	392	-	12196	4630	36	1111	18365	21.93	1683.13
Assam	2836	1811	26416	47408	3904	7111	89486	114.09	335.92
Manipur	959	1118	6638	2172	135	417	11439	51.23	478.89
Meghalaya	810	831	6013	604	106	1294	9658	43.06	418.80
Mizoram	927	169	3730	-	10	239	5075	24.07	569.54
Nagaland	494	398	6273	13160	96	725	21146	127.58	1063.34
Tripura	400	136	5569	8635	228	1328	16296	155.41	510.65
Sikkim	62	186	1670	-	36	65	2019	28.45	373.54
Total NER	6880	4649	68505	76609	4551	12290	173484	66.17	468.28
						All India	2456870	74.73	233.86

* Zila Parishad, Village Panchayat, CD/Panchayat Samiti Roads

NATIONAL HIGHWAYS IN NORTH EAST

Statewise Details of National Highways			
Name of State	NH No.	Route	Length
Arunachal Pradesh			
	52	Baihata-Charali - Tezpur- Bander- Dewa- North Lakhimpur-Pasighat- Tezu-Sitapani-Jn. With NH 37 near Saikhaaghat	310
	52A	Bander- Dewa- Itanagar Gohpur	42
	153	Ledo-indolMyanmar Border (Stillwell Road)	40
			392
Assam			
	31	Jn. With NH 2 near Barhi-Badhtiyarpur- Mokameh- Pumea- Dalkola-Silliguri -Sivok- Cooch Bihar-North Saimara- N albari -Charali- Amingaon Jn. With NH 37	322
	31B	North Salmara-Jogighopa	19
	31C	Near Galgalia- Baghdogra-Chalsa N agar- Kata Goyer- Kata- Balugaon- Hashimara- Raj abhat Khawa-Kochugoan-Siddi In with NH 31 near Bijni	93
	36	Nowgoing-Dabaka-Dimapur (Manipur Road)	167
	37	Pancharatna, Goalpara-Guwahati -J orabat- Kumaragaon-Makum-Saikhoaghat	680
	37A	Kuari Tal-Near Tezpur	23
	38	MaktlJl1- Ledo- Lekhapani	54
	39	Numaligarh-Imphal-Moreh-Indo/Burma Border	115
	44	Shillon g- Passi- Badarpur- Agartaka-Sabroom	111
	51	Paikan- Tura-Dalu	22
	52	Baihata-Charali - T ezipur- Bander- Dewa-N orth Lakhimpur-Pasighat-Tezu-Sitapani-Jn. With NH 37 near Saikhoaghat	540
	52A	Bander-Dewa- Itanagar-Gohpur	15
	52B	Kulajan-Dibrugarh	31
	53	Jn. With NH 44 near badarpur-Jirighat-Silchar- Imphal	100
	54	Dabaka-Silchar-Aizawl- Theriat- Tuipang	335
	61	Kohima- W okha-Mukokchung-Amguri-Jhanji	20
	62	Damra- Baghmara	5
	151	Karimganj - Bangladesh border	14

Annexure - II (Contd.)

	152	Patacharkuchi -Bhutan border	40
	153	Ledo-Indo/Myanmar Border (Stillwell Road)	20
	154	Dhaleshwar (Badarpur)- Bhairabhi -Kanpui	110
			2836
Manipur			
	39	Namuligahr-Imphal-Moreh-Indo/Burma Border	211
	53	Jn. With NH 44 near Badarpur-Jirighat-Silchar- Imphal	220
	150	Aizawal-Churchandpur- Imphal-Ukhrul-Kohima	523
		Portion of highway between Meluri and Jesami	5
			959
Meghalaya			
	40	Jorabat-Shillong-Indo/Bangladesh near Dawki- Amalren-Jowai	216
	44	Shillong-Jowai - Badarpur- Agartala-Sabroom	184
	51	Paikan- Tura- Dalu	127
	62	Damra-Baghmara-Dalu	190
		Shillong -Nongstoin	93
			810
Mizoram			
	44A	Aizawal-Churchandpur-Imphal-Ukhrul-Kohima	165
	54	Silchar-Aizawal- Theriat- Tuipang	515
	54A	Lunglei- Theriat	9
	54B	Venus Saddle-Saiha	27
	150	Aizawal-Churchandpur-Imphal-Ukhrul-Kohima	141
	154	Dhaleshwar (Badarpur)-Bhairabhi-Kanpui	70
			927
Nagaland			
	36	Nowgong-Dabaka-Dimapur (Manipur Road)	3
	39	Numaligarh-Imphal-Moreh-Indo/Burma Border	110
	61	Kohima- W okha-Mukokchuing-Amguri-Jhanji	220
	150	Aizawal-Churchandpur- Imphal-Ukhrul-Kohima	36
	150	Mokakchung- Tuen Tsang-Jeasami	125
			494
Sikkim			
	31A	31A Sivok-Gangtok	62
Tripura			
	44	Shillong-Jowai - Badarpur- Agartala-Sabroom	335
	44A	Aizawal-Sairang-Mamit-Manu	65
			400
Sub-Total			6880
Total			65,569

Roads proposed under modified Phase 'A' of SARDP-NE

I. Updated details of the roads under Phase 'A' approved by CCEA on 22.09.2005					
S.No	State	Scope of work	Category of road (in Km)	Road Length	Estimated cost (Rs. in crore)
1	Assam	Improvement of existing 2-lane NH-37 from Nagaon-Dibrugarh to 4-lane.	NH	315	1890
2	Meghalaya	Construction of new Shillong By-pass connecting NH-40 & NH-44 (2-lane)	NH	50	300
3	Meghalaya	Four laning of existing 2-lane road stretch from Jorabat to Barapani on NH-40.	NH	62	372
4	Nagaland	Four laning of Dimapur to Kohima Road including Dimapur/Kohima Bypass on NH-39.	NH	81	486
5	Sikkim W. Bengal	2 laning with paved shoulders of existing NH-31A from Sevoke to Gangtok	NH	80	570
6	Assam	Improvement of existing single lane road stretches on NH 36, 51, 52, 53, 54, 61, 152, 153 & 154 to double lane with paved shoulders, including Silchar bypass	NH	576	1440
		Total	NH	1164	5058
7	Manipur	Two laning of State road from Maram to Paren to provide connectivity of Manipur State with Nagaland State.	State road	108	165
8	Arunachal Pradesh	Improvement of road from Lumla to Tashigong via Dudunghar (Indo- Bhutan road)	State road	36	55
		Total	State road	144	220
9	Sikkim	Double laning of existing single lane Border Road from Gangtok to Nathula	GS road	95	600
			Total GS road	95	600
			Total (I)	1403	5878
II. Additions to Phase 'A'					
10	Manipur, Meghalaya, Mizoram, Assam & Tripura	2- laning of NH- 44, 53, 54 & 154, including Jowai bypass in Meghalaya	NH	295	620
11	Meghalaya	Improvement and upgradation of existing NH-40& 44, which will be bypassed by Shillong bypass	NH	54	150
12	Assam	Re-alignment and improvement to 2-lane with paved shoulders of NH-37 from Dibrugarh to Rupai and improvement of Stilwell road and NH-38 to 2-lane with paved shoulders	NH	161	412
			Total NH	510	1182
13	Arunachal Pradesh	Improvement and 2-laning of Tahita- Tato and Migging-Bile inter basin roads	State road	176	352
			Total State road	176	352
			Total (II')	686	1534
			Grand Total	2089	7412

List of the roads under modified Phase'B' of SARDP-NE

Sl. No.	Category of road	Section of road	State Length (km)	Tentative
I. National Highways				
1	NH- 44	4 laning of Churaibari - Sabroom section	Tripura	330
2	NH- 44A	2 laningl realignment of NH-44A from Km 11.500 to 130	Mizoram	119
3	NH- 44A	2 laningl realignment of NH-44A from Manu to Tripura/Mizoram Border.	Tripura	110
4	NH- 44E	2 laning of Nongstoin- Nongpoh section of NH-44E	Meghalaya	83
5	NH- 52	2 laning of Jonai- Sitapani section	Arunachal Pradesh	335
6	NH- 54	2 laning of NH-54 from Aizawl to Tuipang section	Mizoram	380
7	NH- 54A	2 laning of NH-54A from Lung lei- Theriat section	Mizoram	9
8	NH- 54B	2 laning of NH-54B from Zero point to Saiha section	Mizoram	27
9	NH- 61	2 laning of Assam/ Nagaland border to Kohima section	Nagaland	234
10	NH- 62	2 laning from Assam/Meghalaya border to approx. km 91 under the charae of BRO	Meghalaya	48
11	NH- 62	km 91 to Baghmara under the charge of PWD	Meghalaya	48
12	NH-150	2 laning of Ukhrul to Yaingangpokpi section of NH-150	Manipur	92
13	NH- 150	2 laning from Kohima to Nagaland/Manipur border	Nagaland	132
14	NH-155	2 laning of Mokokchung to Jessami section	Nagaland	MO
		Total (I)		2287
II. Strategic roads				
15	Indo-Myanmar road	2 laning from Vijaynagar-Miao road	Arunachal Pradesh	157
16	Indo-Myanmar road	2 laning from Miao-Jairampu: road	Arunachal Pradesh	32
17	Indo-Myanmar road	2 laning from Jairampur(NH-153) - Lalpul Bridge	Arunachal Pradesh	9
18	Indo-Myanmar road	2 laning from Lalpul Bridge-Manmao road	Arunachal Pradesh	32
19	Indo-Myanmar road	2 laning from Manmao-Changlang road	Arunachal Pradesh	44
20	Indo-Myanmar road	2 laning from Changlang to Khimiyang road	Arunachal Pradesh	35
21	Indo-Myanmar road	2 laning from Khimiyang - Sangkuhavi road	Arunachal Pradesh	33

Annexure-IV (Contd.)

Sl. No.	Category of road	Section of road	State Length (km)	Tentative
22	Indo-Myanmar road	2 laning from Sangkuhavi-Lazu road	Arunachal Pradesh	40
23	Indo-Myanmar road	2 laning from Lazu-Wakka road	Arunachal Pradesh	75
24	Indo-Myanmar road	2 laning from Wakka- Khanu road	Arunachal Pradesh	21
25	Indo-Myanmar road	2 laning from Khanu - Konsa road	Arunachal Pradesh	30
26	Indo-Myanmar road	2 laning from Konsa-Panchao road	Arunachal Pradesh	29
27	Indo-Myanmar road	2 laning from Panchao - Nagaland Border road	Arunachal Pradesh	25
28	State road	2 laning from Yingkiong to Bishing(Porgo via Gette-Pugging-Likor-Paling-Jido) road	Arunachal Pradesh	160
29	State road	2 laning from Zido-Singha road	Arunachal Pradesh	94
30	State road	2 laning from Pango-Jorging road	Arunachal Pradesh	90
31	State road	2 laning from Sarkam point-Sing a via Eko-Domping road	Arunachal Pradesh	125
Total (II)				1031
III.	State GS roads			
32	ODR	2 laning of Yupia- Pappu road	Arunachal Pradesh	10
33	MDR	2 laning of Golaghat- Rangajan road	Assam	7
34	MDR	2 laning of of Diphu- Manja road	Assam	16
35	MDR	2 laning of Haflong- Jatinga road	Assam	8
36	MDR	2 laning of Dhubri- Gauripur road	Assam	8.5
37	RR	2 laning of Baska- Bamara road	Assam	25-
38	SH	2 laning of Udalgiri- Rowta road	Assam	13
39	SH	2 laning of Morigaon- Jagi road	Assam	23
40	SH	2 laning of Barpeta- Howly road	Assam	12
41	SH	2 laning of Goalpara- Solmari road	Assam	6.5
42	SH	2 laning of Kokrajhar- Karigaon road	Assam	18
43	SH	2 laning of Tamenglong- Khonsang road	Manipur	40
44	SH	2 laning of Pallel Chandel road	Manipur	18

Annexure-IV (Contd.)

Sl. No.	Category of road	Section of road	State Length (km)	Tentative
45	SH	2 laning of Nongstoin- Rongjeng- Tura road	Meghalaya	201
46		2 laning of William nagar to Nengkhra road & other ODRroad (2 side connectivity with respective length of 14 & 8 km)	Meghalaya	22
47 92	SH	2 laning of Lunglei- Demagiri road	Mizoram	
48 30	MDR	2 laning of Seling - Thau road	Mizoram	
49	MDR	2 laning of Pfutsero- Zhamai road	Nagaland	18
50	MDR	2 laning! construction of road from Athibung- Khelma	Nagaland	55
51	MDR	2 laning of Phek- Pfutzero road	Nagaland	79
52	MDR	2 laning of Longleng- Changtongya road	Nagaland	35
53	MDR	2 laning of Tamlu- Merangkong road	Nagaland	50
54	ODR	2 laning of Peren- Kohima road	Nagaland	96
55	New	New alternative highway from Melli to Singtam	Sikkim	27
56	SH	2 laning of Gyalshing- Singtam road	Sikkim	80
57	SH	2 laning of Tarku- Namchi road	Sikkim	32
58	SH	2 laning of Namchi- Jorethang road	Sikkim	20
59	SH	2 laning of Legship- Jorethang road	Sikkim	26
60	SH	2 laning of Jorethang- Melli road	Sikkim	27
61	MDR	2 laning of Kailasahar- Kumarghat road	Tripura	26
62	GS road	2 laning of Seppa-Nechipu road	Arunachal Pradesh	96
63	GS road	2 laning of Koloriang- Joram road	Arunachal Pradesh	158
64	GS road	2 laning of Yingkiong- Pasighat road	Arunachal Pradesh	167
65	GS road	2 laning of Anini- Meka road	Arunachal Pradesh	235
66	GS road	2 laning of Hawaii- Hawa Camp road	Arunachal Pradesh	126
67	GS road	2 laning of Along- Bame road	Arunachal Pradesh	31
68	GS road	2 laning of Tawang- Balipara road	Arunachal Pradesh/ Assam	315
69	GS road	2 laning of Ziro- Pahumara road	Arunachal Pradesh! Assam	124
70	GS road	2 laning of Lekabali- Daporizo road	Arunachal Pradesh! Assam	222
71	GS road	2 laning of Champa i- Seling road	Mizoram	150
72	GS road	2 laning of Zunheboto- Chakabama road	Nagaland	128
73	GS road	2laning of Mon-Tamlu road	Nagaland	50
74	GS road	2 laning of Gangtok- Mangam road	Sikkim	68
		Total (III)		2991
		Total (I+II+III)		6309

Annexure-V

EAST WEST HIGHWAY: WESTERN SECTOR (WS) - (BALIPARA TO PASIGHAT - 939 KM)

Sl.N o.	Segment No.	Name of the Segment	Length in Km	Present Owner	Category of existing road	Approx cost in Rs. crores	Present program
1	WS/1	Balipara (On NH Assam to Bhalukpong	32.00	BRO	MDR	38.50	Double laning under SARDP- NE
2	WS/2	Bhalukpong to Nchipu	47.00	BRO	ODR	56.50	Double laning under SARDP- NE
3	WS/3	Nechipu-Seppa	99.00	BRO	ODR	119.00	Improvement under SARDP- NE
4	WS/4	Seppa-Sagalee	170.00	PWD (NEC)	ODR	204.00	Proposed as an additional schemes under SARDP-NE
5	WS/4	Sagalee-Toru- Doimukh	75.00	PWD (NEC)	ODR	90.00	Improvement NLCPR-NE
6	WS/6	Nirjuli-Potin	48.00	PWD (NEC)	ODR	57.50	Proposed for improvement
7	WS/7	Potin-Yazali	13.00	BRO	ODR	15.50	Double laning under SARDP- NE
8	WS/8	Yazali-Ziro	42.00	BRO	ODR	50.50	Double laning under SARDP- NE
9	WS/9	Ziro-Daporijo	162.00	BRO	ODR	194.50	
10	WS/10	Daporijo-Bam	108.00	BRO	ODR	129.50	Double laning under SARDP- NE
11	WS/11	Bam-Along	42.00	BRO	ODR	50.50	Double laning under SARDP- NE
12	WS/12	Along-Pangin	26.00	BRO	ODR	31.00	
13	WS/13	Pangin-Pasighat (on NH-52)	75.00	BRO	ODR	90.00	Selected for intermediate laning under ADB (Trache I)
Total			939.00			1127.00	
In Arunachal Pradesh			907.00	Km			
In Assam			32.00	Km			

Annexure-V (Contd.)

EAST WEST HIGHWAY: EASTERN SECTOR (ES) - (MAHADEVPUR-BIMLAPUR - 320 KM)

Segment No.	Name of the Segment	Length in Km	Present Owner	Category of existing road	Approx cost in Rs. crores	Present program
1/ES	Mahadevpur-Bordumsa (on NH-52 on Assam Border)	22.00	PWD AP	ODR	26.40	Intermediate laning under 10th Plan of NEC
2/ES	Bordumsa-Namchuk	35.00	PWD AP	ODR	42.00	Intermediate laning under 10th Plan of NEC
3/ES	Namchuk-Jairampur	15.00	PWD AP	ODR	18.00	
4/ES	Jairampur-Changlang	76.00	PWD AP	ODR	91.20	Improvement under RIDF
5/ES	Changlang-Khonsa	64.00	PWD AP	ODR	76.80	Proposed as an additional scheme under SARDP-NE
6/ES	Khonsa-Longding	52.00	BRO	ODR	62.40	
7/ES	Longding-Ranglua	42.00	PWD (NEC)	ODR	50.40	
8/ES	Ranglua-Bimlapur (in Assam)	14.00	PWD ASSAM	ODR	16.80	
Total		320.00			384.00	
In Arunachal Pradesh		306.00	Km			
In Assam		14.00	Km			

Annexure-VI

List of Roads Proposed under NESRP (ADB)

State	Section of Road	Length (kms)
Arunachal	Pasighat (NH52) - Pangin	81 km
Assam	Barama (NH31) - Tamulpur-Paneri-Udalguri	91.1 km
	Tinsukia (NH38) - Jaipur	44.6 km
	Kokrajhar (Rlwy Station) - Bilasipara (NH31)	28.6 km
	Dudhnoi (NH37) - Goalpara (NH31B) - Tikrikilla	97.9 km
	Neelam Bazar (NH44) - Fakirbazar (border with Bangladesh)	20.6 km
	Bongaigaon (NH31) - North Salmara (NH 31B) - Barpeta	54.5 km
Manipur	Tupul (NH53) - Bishnupur (NH150) - Thoubal (NH39)-Kasom Khullen	123.3 km
Meghalaya	Mawngap (NH40E) - Umpung	77 km
	Mawshynrut (Riangdo) - Hahim	37.3 km
	Garobadha - Barengapara (NH51)	98.5 km
Mizoram	Serchhip (NH54) - Thenzawl - Buarpui	64 km
	Champhai - Khawbung	72 km
Nagaland	Champang - Tizit	(180 km)*
Sikkim	Melli (NH31A) - Nayabazar	26.5 km
	Nayabazar - Namchi	19 km
	Rumtek area (NH31A) - Sang	25 Km
Tripura	Khowai (border with Bangladesh) - Teliamura (NH44)	35.6 km
	Udaipur (NH44) - Melaghar	27.1 km
	Total (19 roads)	1203.6 km

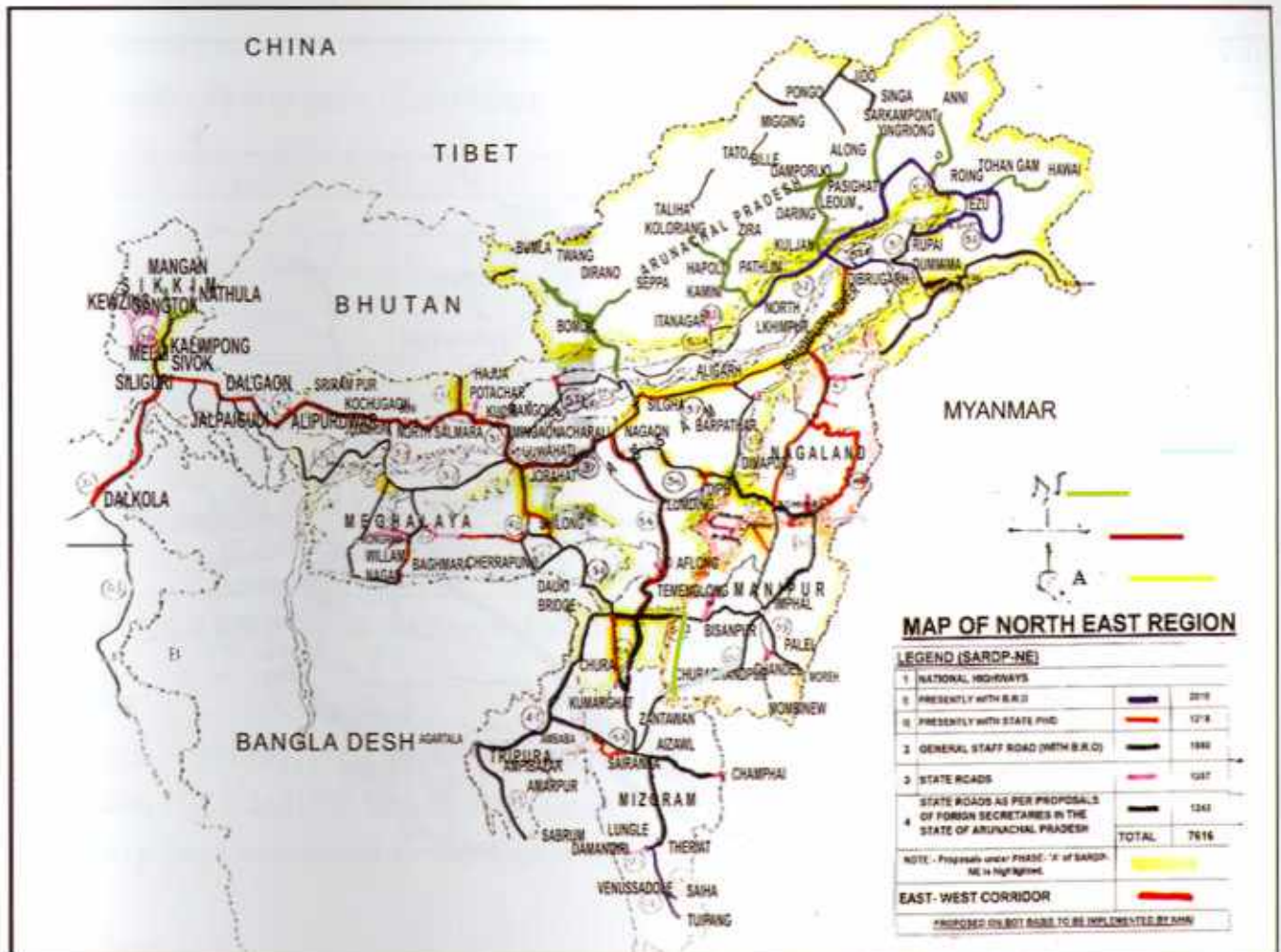
* Study yet to be done

Annexure-VII

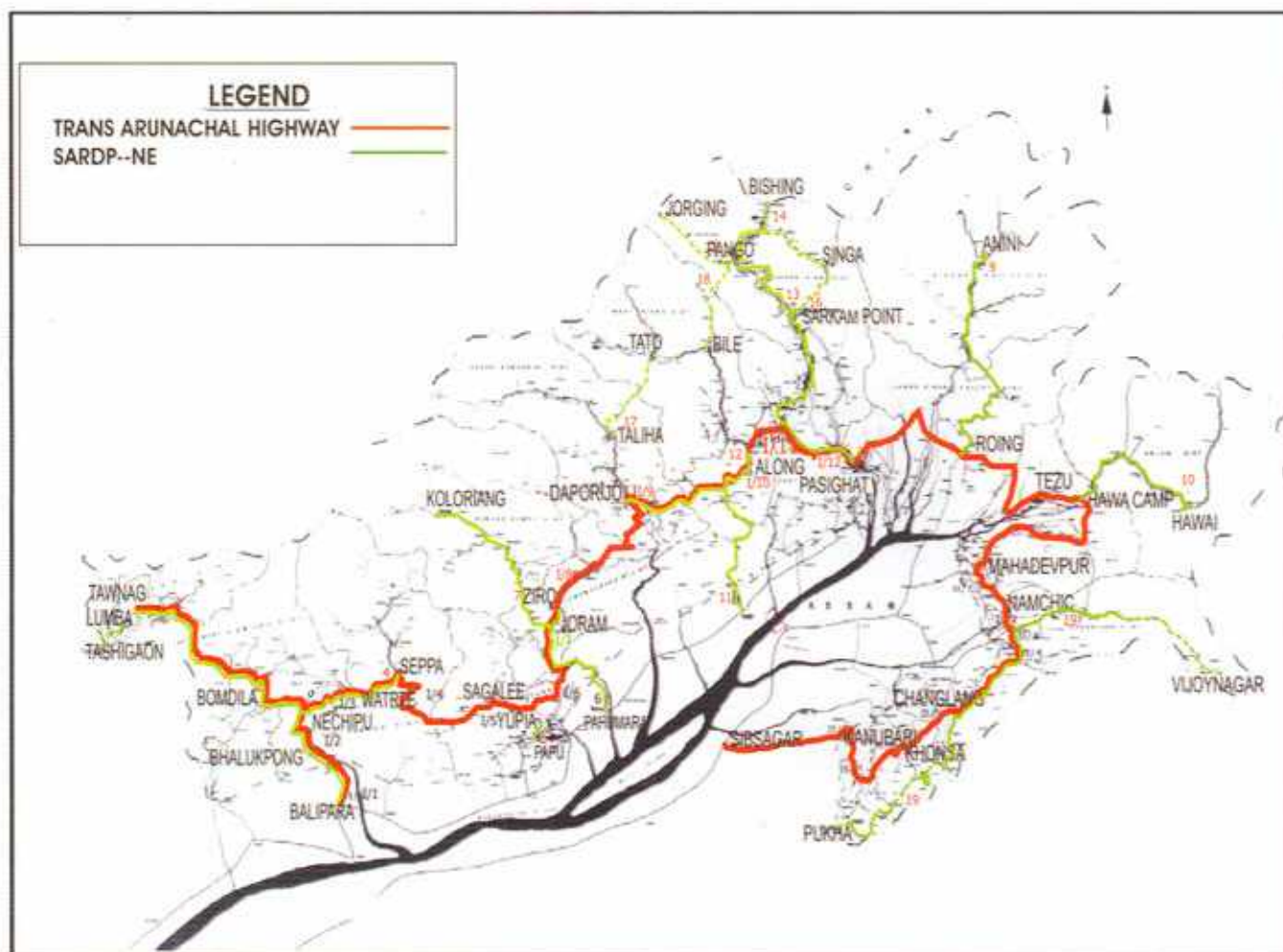
Preliminary Project Cost Estimate and Finance Plan

Item	Total	ADB	Government
I. Investment Component			
1. Right of Way (Resettlement & Rehabilitation)	1.5	0	1.5
2. Civil Works (roads and bridges)	289.6	220.8	68.8
3. Equipment	1.6	1.6	0
4. Contract Supervision Consultant (Inc. Design)	13.9	13.9	0
II. Institutional Capacity Building	17.8	14	3.8
Physical Contingency	26	20	5.9
Price Contingency	38.5	29.7	8.8
Interest and Commitment Charges	39.9	0	39.9
Total	428.7	300 (70%)	128.7 (30%)

MAP 'A' (SARDP-NE)



MAP 'B' (Trans Arunachal Highway)



RAILWAYS

Existing Railway Network:

The updated (as on 31.03.2006) position of Railway network is as under (Refer Map):

Gauge Conversion:

- Guwahati- Lumding (GC) including Chaparmukh-Haibargaon (202kms)

State	BG	MG	Total kms	Under Construction	
				NL	GC
Arunachal	-	1.26	1.26	26	-
Assam	1227.70	1078.12	2305.82	179	1058
Tripura	-	64.42	64.42	88	-
Nagaland	11.13	1.72	12.85	-	-
Manipur	-	1.35	1.35	98	10
Mizoram	-	1.50	1.50	-	-
Meghalaya	-	-	-	9.5	-
Sikkim	-	-	-	-	-
Total	1238.83	1148.37*	2387.2	400.5	1068

* Almost entire MG has been sanctioned for gauge conversion (excluding 61 km spurs leading to dead ends)

2. Since 1992-93, 1102 kms of gauge conversion (GC) and 163 kms of New Lines (NL) have been completed in NE region as under:

- Lumding-Dibrugarh and linked fingers GC (620kms)
- New Jalpaiguri/Siliguri- New Bongaigaon (280kms)

New Line:

- Guwahati-Jogighopa new line (142 kms)
- Kumarghat-Manu (21kms) of Kumarghat-Agartala new line (109 kms)

3. Projects under progress:

Following six new lines and five gauge conversion works are under various stages of progress (details at Annexure I):

Name of the Project (km)	Cost	Outlay 2006-07	Expenditure up to 31.3.06
New Line			
1. Kumarghat- Aagartala (109 kms)	879.99	176	476.53
2. Harmuti(Bedati)-Itanagar (33 kms)	156.00	4	0.01
3. Jiribam-Imphal Road (Tupul) (97.9 kms)	727.56	85	2.57
4. Bogibeel bridge with links between Dibrugarh &			

North Bank (46kms)	1767.36	230	456.45
5.New Maynaguri-Jogighopa (257 kms)	894.38	35	100.73
6.Dudhoni-Depa (15.5 kms)	22.33	0.01	0.5
Gauge Conversion			
1.New Jalpaiguri/Silliguri-New Bongaigaon (419.5 kms)	890.83	12	770.56
2.Lumding-Silchar-Jiribam& Badarpur-Baraigram (292 kms)	1496.42	371	512.96
3.Katakhali-Bairabhi (84 kms)	88.70	0.01	0
4.Rangia-Murkongselek (510.3 kms)	915.70	10	0
5.Haibargaon-Mairabari & Senchoa Jn.-Silghat Town (107kms)	882.12	1	731.43

4. Expenditure in 10th Plan & Fund requirement in the 11th Plan:

Net capital available and actual expenditure under rail budget is as under:

It is proposed to provide rail link to Arunachal, Mizoram, Meghalaya, Sikkim and Nagaland by taking up new rail lines (Dimapur-Zubza,

(Rs.in crores)

	2002-03	2003-04	2004-05	2005-06	2006-07(BE)
Net capital available	4040	4044	4098	3256	4807
10% for NE region	404	404	410	326	481
Actual/likely Exp.	441	571	509.59	377.77	570
Percentage	10.92	14.13	12.43	11.6	11.85

Thus about Rs. 500 crore is being spent for projects in NER through Railway budget annually. Out of the total anticipated cost of Rs.8721 crore (Rs.3104 crore for National Projects), Rs.3051 crore (Rs.992 crore towards National Projects) has been spent up to March, 2006. An outlay of Rs.924 crore (including Rs.632 crore for National Projects) is available for 2006-07. Thus there is a throw forward of Rs.4746 crore (Rs.1480 crore for National Projects) beyond March, 2007, for the ongoing rail projects.

Bhairabi-Aizwal, Azra-Byrnihat, Murkongselek-Passighat & Sivoke-Rangpo) in the 11th plan. The cost of these projects would be Rs.2180 crore. About Rs.7300 crore would be required in the 11th plan for ongoing projects and new rail lines proposed.

5. National Projects Development:

(i) **Rangia -Murkongselek gauge conversion** along with linked fingers (Rs.900

crore) and a **rail-cum road bridge at Bogibeel** near Dibrugarh (Rs.1800 crore) were posed to the CCEA as National Project for completing the project by 2010-11. However, it has been directed that projects be implemented through a SPV and funds be located in consultation with Ministry of Finance and Planning Commission. These projects, being capital intensive and with negative ROR, do not seem to be amenable to SPV mechanism. Two more projects (i) Dimapur to Zubza (Kohima) (Rs.850 crore) and (ii) Azara to Byrnihat (Rs.200 crore) have also been recommended as National Project for the consideration of CCEA.

(ii) Arunachal Pradesh, Mizoram, Meghalaya, Sikkim, Nagaland are without rail network and therefore Hamuti(not Bedati)-Itangar, Murkongselek-Passighat, Bhairabi-Aizwal, Dudhoni-Depa, Azra-Byrnihat, Sivoke-Rangpo & Dimapur-Zubza projects should be declared as National Projects. The possibility of providing access corridors to bordering countries is essential, especially Bangladesh. The rail link to Agartala connecting Akhura on the Bangladesh side will provide another access to Bangladesh by railways. Hence Agartala-Akhura should be declared as National Project.

6. Surveys for following new rail lines have been taken up:

Name of project	Remarks	Status
Agartala-Sabroom (110kms)	Will provide link with Bangladesh	Survey completed and cost assessed at Rs.557 crore with ROR of (-) 28.7 %.
Agartala-Akhaura (Bangladesh) (5.4 kms)	Will connect Bangladesh railway network with NE region	Indian portion completed. Bangladesh portion remaining.
Dimapur-Zubza (Kohima)-88kms	Will link capital of Nagaland	Expanded Railway Board has recommended as National Project.
Bhairabi-Aizwal (54 kms)	Will connect capital of Mizoram	Survey is completed and report under examination.
Azara-Byrnihat (19.8 kms)	Will bring Meghalaya on railway map	Expanded Railway Board has recommended as National Project.
Murkongselek-Pasighat (30 kms)	Will link Pasighat in Arunachal Pradesh	PET survey in progress and to be completed in June 07.
Sivoke-Giellikhola (25 kms)	Will bring Sikkim on railway map	2004-05 survey assessed cost at Rs.105 crores with (-) ROR. Updating survey from Sivok to Rangpo taken up.

7. Freight Terminals Utilisation and Improvement:

(i) Existing goods sheds and sidings are idle over half of the time and Trade & Industry refuse to use them round the clock due to security & labour problems. Free time for a 40 covered wagon rake is 9 hours. Detention at New Guwahati is over 24 hours which hits rolling stock asset utilisation. Following districts need to augment their warehousing, so that a BG full trainload of 2400 tonnes can be unloaded in free time of 9 hours & put back in to the cycle of transportation. Presently rakes are detained for 24-48 hours due to inadequate centralised storage capacity.

In addition following improvement are suggested:

- (i) State Govt., Private Traders and FCI / CWC etc. should develop modern rail-side warehouse complexes with mechanized handling facilities.
- (ii) In close proximity of all FCI unloading stations, there should be infrastructure support of warehouse to store approximately three BG rakes or 7500 tonnes.
- (iii) At Changsari (near Guwahati), FCI or State Govt. should develop rail siding with warehouse capacity of 50,000 tonnes.

State	Districts
Assam	Kokrajhar, Dhubri, Nagong, Silchar, Hailakandi, Karimganj
Tripura	North Tripura
Mizoram	Sairang
Manipur	Senapati
Meghalaya	East Khasi Hills

- (ii) The following siding owners should plan for railway facility remodelling and extend part rake sidings to provide full length loading/unloading handling on single line.

- (iv) In view of large prospects of cement manufacturing in Meghalaya, cement plants with exclusive centralized warehouse facility for full rake handling should come up in Lumding division/N.C Hills/Silchar.

Priority	Sidings
1	Hindustan Paper Corporation/Jagiroad, Assam
2	Food Corporation of India/Hojai, Assam
3	Defence siding/New Guwahati, Assam
4	M/S Coal India siding at Ledo, Margherita, Assam

- (v) M/S SAIL should have a stock yard in the out skirts of Guwahati and Rangiya .
- (vi) Shift freight loading from New Guwahati to Azara (alternative freight terminal).
- (vii) Build a new state-of-the-art terminal facilities on the proposed Guwahati bye pass.

8. Other issues:

The Region is having adverse law and order conditions. Necessary protection to the field sites have been given in Tripura and Manipur. However, the militant extortion and threat activities have increased on Lumding-Silchar section recently. Assam also needs to provide adequate security to the staff and workers.

9. Recommendations:

- Complete the ongoing projects in the 11th plan (para 3 of Railway Chapter).
- Declare following projects as National Projects or finance through GBS:
 - (i) Rangia-Murkongselek gauge conversion along with linked fingers
 - (ii) Bogibeel rail-cum-road bridge project

- (iii) Harmuti-Itanagar & Murkongselek-Passighat for Arunachal
- (iv) Dudhoni-Depa & Azra-Byrnihat for Meghalaya
- (v) Sivok-Giellikhola and further be extended to Rangpo for Sikkim
- (vi) Bhairabi-Aizwal for Mizoram
- (vii) Dimapur-Zubza (Kohima) for Nagaland
- (viii) Agartala-Akhuara for Tripura

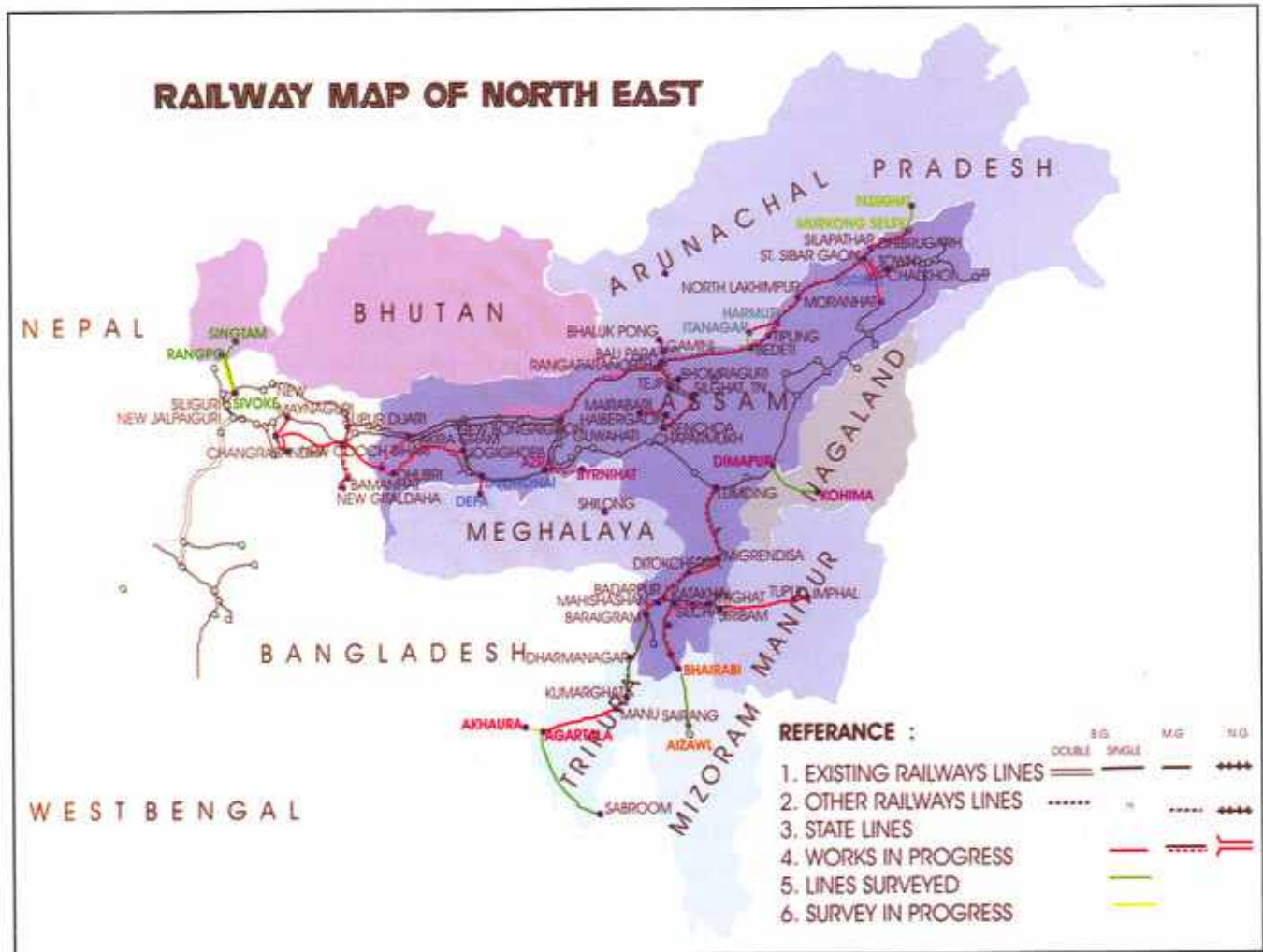
Other rail links/gauge conversion could be taken up out of Railway's own resources including 10% obligation for NER.

- Take up Guwahati Bye Pass railway line urgently for diverting passenger and freight away from the main city for movement to upper & lower Assam and to Manipur, Mizoram, Tripura.
- Extend Lumding-Badarpur section gauge conversion to existing/proposed railway lines in Manipur, Mizoram and Tripura.
- Take up warehouse infrastructure improvement (as suggested in para 7 of Railway Chapter) on priority.

Project/State	Remarks/Status	Target
Projects which will provide connectivity to capital cities		
1. Kumarghat-Agartala (Tripura) New Line	This has been declared as National Project. Kumarghat-Manu (20 Kms) completed. On Manu-Agartala (89 Kms) section, forest clearance and land acquisition completed. 226 out of 228 lac cum earthwork, 162 out of 170 minor bridges, 13 out of 15 major bridges, 24 out of 25 ROB/RUB and 0.37 out of 2 lac cum ballast collection completed. 2361 m out of 5100 m tunnelling completed. Tunnelling progress is lagging behind on tunnel no. 2.	28.02.07
2. Hamuti(Bedati)-Itanagar (Assam, Arunachal Pradesh) New Line	This will bring Arunachal Pradesh capital on the railway network. Government of Arunachal Pradesh informed on 09-08-2000 to abandon the alignment from Harmuti to Itanagar and requested on 06-12-2000 to change the alignment to Bedati-Itanagar (45 km). Survey for alternative alignment from Bedeti to Itanagar has been completed and report is under examination.	
3. Jiribam-Imphal Road (Tupul) (Manipur) New Line	This has been declared as National Project. Final Location Survey (FLS) for 26 kms completed and the detailed estimate for same is under preparation by RITES .FLS for balance section is likely to be completed by March, 2007.	March, 2010
Megabridge project connecting North and South bank		
4. Bogibeel bridge with linking lines between Dibrugarh and North Bank line Assam New Line	This will provide connectivity to North and South Bank. It is proposed to put up for reconsideration of CCEA for declaration as National Project. 85 out of 146 lac cum earthwork, 6 out of 17 major bridge, 47 out of 90 minor bridge and 2 out of 10ROB/RUB completed. 12 out of 17.5 lac cum boulders collected and tenders for 14 km track linking has been finalized. Detail design by RITES for main bridge is in progress. Price bid from pre qualified contractors for the construction of sub structure of the bridge has been opened.	March, 2011
Other Works		
5. Gauge Conversion of New Jalpaiguri/Siliguri-New Bongaigaon (Assam)	The GC from New Jalpaiguri-New Bongaigaon (279kms) of main line completed and commissioned. On branch line from Alipurduar to Bamanhat (73.32 kms), 4.03 out of 4.98 lac cum of earthwork, 5 out of 10 major & 44 out of 53 minor bridge and total ballast procurement (1.3 lac cum) completed. Track linking from New Coochbehar-Alipurdaur (23 kms) is in progress. On Fakiragram-Dhubri (66 kms) including Golakganj-Gauripur section (15 kms)-1.31 lac cum out of 3.79 lac cum earthwork, 2 out of 13 major bridges and 4 out of 27 minor bridges completed. Ballast collection has started in Golakganj-Gauripur section.	New Coochbehar-Alipurdaur by Sep, 2006 Balance during 2007-08

Project/State	Remarks/Status	Target
Projects which will provide connectivity to capital cities		
Other Works		
6. Lumding-Silchar-Jiribam & Badarpur-Baraigram Gauge Conversion (Assam, Manipur)	This has been declared as National Project. Progress is affected due to non removal of encroachment of railway land for which matter is being pursued with State Govt. On Lumding-Badarpur (171 Kms)-land acquisition completed, 291 out 391 lac cum earthwork, 11 out 67 major bridges, 210 out of 284 minor bridges, 718m out of 17134m of tunnel and 15400 out of 366504 cum ballast completed. On Badarpur-Jiribam-6.31 out of 12.79 hect. of land have been acquired and proposal for balance section submitted to State Authorities. 10.93 out of 27.8 lac cum earthwork, 10 out of 28 major bridges, 22 out of 105 minor bridge, nil out of 3 ROBs and 7550 out of 1.25 lac cum ballast collection completed. The work involves diverted alignment of 44.62 kms.	March, 2009
7. New Maynaguri-Jogighopa (Assam, W.B.) New Line	354.64 hect. land of 36 villages out of 981.76 hect. of 126 villages has been acquired. Land acquisition proceedings of 16.77 Kms for 3.57 hect. land are not yet finalized by Distt. Administration. On New Maynaguri-New Cooch Behar (93 Kms) section, 8.5 lac cum out of 29 lac cum earthwork, 2 out of 20 major bridges, 40 out of 84 minor bridges completed. On New Cooch Behar-Jogighopa (Abhayapuri) (149 Kms) section, earthwork & minor bridges between New Cooch Behar - Golakganj are in progress. One important bridge over river Gangadhar (13 x 45.7 m) is in progress.	
8. Dudhnoi-Depa (Assam, Meghalaya) New Line	Govt. of Meghalaya has proposed alternative route from Depa to Mendhipathar. Railway has been advised to do Final Location Survey (FLS) for this alignment. Survey work has been taken up.	
9. Katakhal-Bairabhi GC (Assam,Mizoram)	This work will be taken up once Lumding-Silchar is in advance stage of completion.	
10. Rangia-Murkongselek GC (Assam)	The project on completion will connect the region without the need of transshipment from MG to BG and vice-versa. It is proposed to put up for reconsideration of CCEA for declaration as National Project.	
11. Gauge Conversion of Haibargaon-Mairabari & Senchoa Jn.-Silghat Town (Assam)	Lumding-Dibrugarh with linked fingers completed and commissioned. Ministry of Defence has agreed to share the cost of conversion of Senchoa-Silghat town. In this section 3.24 out of 7.75 lac cum earthwork, 3 out of 7 major bridges, 24 out of 84 minor bridges, 21000 out 75000 cum of balast collection completed. 46100 PSC line sleeper transported to site and 40 track KM of second hand rail has been collected.	Senchoa Jn.-Silghat town (62kms) by 31.12.06

Railway Map



AIR CONNECTIVITY

Existing Airports in NER:

There are 22 airports and civil enclaves (CE) in NER, of which following 11 have schedule operations (MAP):

night operations are permitted through Guwahati and Agartala airports only. Instrument landing systems are available at Dibrugarh, Guwahati, Imphal and Agartala and are being installed at Dimapur, Lilabari, & Silchar.

Sl No.	Name	Controlling Authority	Suitability
1.	Agartala	AAI	A 320
2.	Lengpui (Aizwal)	State Govt.	B 737-200
3.	Dibrugarh	AAI	A 320
4.	Dimapur	AAI	B 737-200
5.	Guwahati	AAI	A 300,B 737
6.	Imphal	AAI	A 320
7.	Jorhat (CE)	IAF	B 737-200
8.	Lilabari	AAI	A 320
9.	Shillong	AAI	ATR-42
10.	Silchar (CE)	IAF	B 737-200
11.	Tezpur (CE)	IAF	B 737-200

The ground lighting facilities are available at all the above airports barring Shillong. However,

The other following 11 airports are small and capable of handling only small aircrafts:

Sl No.	Name	Controlling Authority	Suitability	Operational Status
1.	Rupsi, Assam	AAI	Do 228	No
2.	Shella, Assam	AAI	Do 228	Abandoned
3.	Tural, Mizoram	AAI	Do 228	Closed
4.	Kamalpur, Tripura	AAI	Do 228	Yes
5.	Kaila-Shahar, Tripura	AAI	Do 228	Closed
6.	Khowai, Tripura	AAI	Do 228	Closed
7.	Along(CE), AP*	State Govt.	Do 228	Yes
8.	Daporizo (CE), AP*	State Govt.	Do 228	Yes
9.	Passighat, AP	AAI	Do 228	No
10.	Tezu(CE), AP*	State Govt.	Do 228	No
11.	Zero(CE), AP*	State Govt.	Do 228	Yes

*PHHL operates helicopter services to these airports on request/demand from State Govt.

These airports have short runway, can handle only small aircraft/helicopters and need upgradation of facilities before scheduled airline operations can be allowed. Only four airports out of the 11 are presently operational for non-scheduled airlines. The seven other are non-operational, although earlier Indian Airlines/Vayudoot operated through some of these airports.

2. Air connectivity in NER involves three aspects; (a) construction of airports in three State capitals of Sikkim, Nagaland & Arunachal Pradesh and renovation/revival of some, (b) maintenance of such airports and (c) regular airlines operation.

3. New Airports :

Airports in State capitals of Sikkim, Arunachal & Nagaland are not justified on the criterion of commercial viability but are needed for strategic reasons and mainstreaming of NER in general. Moreover, poor road/rail connectivity, huge unexploited potential of tourism and providing emergency services, justify these airports. Ministry of Civil Aviation and Airports Authority of India has informed that the estimated cost of these green field airports is Rs. 1020 crores (about Rs.680 crore if only Pakyong & Itanagar are taken up, Nagaland already has one operational airport at Dimapur).

As per the existing policy, such green field airports need be 100 % centrally funded and AAI

is not in a position to incur expenditure out of its internal resources. Moreover, private participation (PPP) would not work. AAI is reported to be already spending more than 10% mandated for North East Region. A list of major works under execution by them is at Annexure-I. Some airports have been built by AAI with the joint funding of NEC & Ministry of Civil Aviation on 60:40 basis.

As regards the Sikkim airport, State Government have signed MoU with AAI in March 2002 for constructing airport as deposit work and Rs. 1 crore was released to AAI for preparation of DPR. The DPR prepared through M/s E&Y establishes the technical feasibility of airfield capable of taking ATR type aircraft with 50 to 60 passengers under good weather conditions (available 7-8 months a year). The financial feasibility is very low. The cost is Rs. 340 crore (excluding land, being provided by the State Govt.). Rs. 100 crores is already available for the purpose under the 12th Finance Commission award and balance Rs. 240 crores is expected from the Planning Commission. Incidentally, Sikkim Govt. had invited offers from private firms. But the offers were not found favourable.

As regards Nagaland and Arunachal Capital airports, detailed proposals are yet to be made. Nagaland already has an airport at Dimapur (60 kms from Kohima) and is well connected with Calcutta & Guwahati. DPR is, however, being prepared for Kohima at Chiethu (20 kms from

Kohima). But Arunachal Pradesh, with a vast geographical area, does not have even one operational airport and needs it urgently. Apart from its capital at Itanagar (Western part of Arunachal), airports should be renovated & operationalised for Passighat (Central part) & Tezu (Eastern part) on top priority. Ministry of Defence has recently expressed reservation over construction of civilian Airport at Itanagar and needs expeditious resolution.

4. Air connectivity in Arunachal & Sikkim :

Pawan Hans has leased a Dauphin helicopter to Arunachal since Dec, 95, being used for passenger service connecting Itanagar with Guwahati, Tezu, Ziro, Roing etc. 75% of fare is subsidized by MHA, 25% paid for by passenger and deficit, if any, provided by the State Govt. Another MI-172 helicopter provided by Pawan Hans to connect high altitude places (Tanang, Rupa, Bomdila etc.) is under overhaul at Kazan, Russia since long.

Similarly, Pawan Hans has leased 5-seater Bell helicopter to Sikkim since 1998. Passenger/tourist flights are run on Gangtok to Bagdogra route 6 days a week. Payment is on the same terms (Details of Pawan Hans operations at Annex-II).

5. O&M of airports:

AAI has informed that only 11 airports are profit-making and the remaining 116 (including all NE

Airports) are loss making and are being cross-subsidized. AAI is spending about Rs. 60 crore annually on O&M of NE Airports. AAI expects from Govt. of Sikkim Rs. 3-4 crore annually for O&M of the proposed Gangtok (pakyong) airport.

6. Airlines operations:

NEC provides Rs. 35 crores annually (out of plan funds) to Indian Airlines / Alliance Air for operations of 4 ATRs in North East. Air Deccan is operating 12 ATR-42 aircraft, Jet Airways 8 ATR-72 and so on. But since the hub of operations of IA remains at Kolkata (AI Staff are reportedly reluctant to stay at Guwahati) rather than Guwahati against the terms of the agreement, flights are highly uncertain and therefore not very popular. One view is that if the same subsidy is provided to private operator based on competitive bid, with a condition to operate from Guwahati, would ensure more and reliable service.

Moreover, the condition of 10% passenger traffic of any airlines to be for category II States (North East, J&K, Lakshwadip and Andmans) would be effective for air connectivity within the North East, only when services to Guwahati from Delhi (it has enough traffic) are not counted towards this obligation.

7. Airport works in 10th and 11th Plan:

During 10th Plan, AAI has spent about Rs.150 crores on modernization, upgradation and

improvement of facilities for safe aircraft operation in NE airports. New terminal buildings have been completed at Lilabari, Agartala, Tezpur and Dimapur. Expansion of terminal building at Guwahati & Silchar has also been completed. Strengthening & extension of runway for A-320 operation has been completed at Dimapur, Agartala, Imphal and Lilabari airports.

Works are in progress for construction of new terminal building at Dibrugarh, extension & strengthening of runway at Silchar, Dibrugarh and Guwahati. The cost is estimated at Rs.175 crores and works are like to be completed during 2007-08.

During 11th plan, action will be on operationalisation of non-operational airports and development of airports for scheduled air services at Rupsi, Passighat, Kamalpur, Kailashahar by undertaking expansion and modification works. As part of modernization of 35 non-metro airports in the country, four non-metro airports in NE (Guwahati, Dimapur, Agartala and Imphal) are proposed to be modernized during the 11th plan. Outlay for 11th plan for development of airports has been pegged at Rs.851.80 crores (Annexure-III).

The airports of Along and Daparizo, although presently operational for 20 seater aircrafts, have not been included in the development of airports

for scheduled air services as they are situated in difficult and hilly terrain.

Tezu airport is suitable for operation of ATR-42-320 (44 seater) by undertaking minor repair and renovation works at estimated cost of Rs.20 crore. Similarly, Zero airport can be made operational for ATR-42-320 aircraft at estimated cost of Rs.30 crore. Total outlay required for improving air connectivity in NER during 11th plan would be around Rs.1600 crore.

8. Recent initiatives to improve air connectivity:

M/s Sky king Aviation Pvt.Ltd. has been granted NOC to operate as scheduled operator on 11.08.06. Sky King plans to introduce a new regional airline specifically to serve destinations in NER. M/s Surya Air proposes to set up a short-haul feeder air service to provide connectivity within NER. It has been granted NOC to operate non-scheduled air transport passenger services.

9. Recommendations:

- a) Construct airports at Pakyong (Gangtok) & Itanagar (Arunachal) with increased viability gap funding from GOI.
- b) Operationalise non-operational airports in NER (Rupsi, Passighat, Kailashahar, Tezu) and expand scheduled air services to smaller airports (Zero, Kamalpur) which were in fact being serviced earlier.

- c) Do not count flights to Guwahati from Delhi towards 10% obligation of airlines for Category II States.
- d) Rs. 35 crore provided by NEC to IA be borne by MoCA and provided to airlines/operators based on competitive bidding subject to their operating from NER and running air service to smaller places having landing facilities. In the meantime, the hub for operation and maintenance of IA services to NE be shifted forthwith to Guwahati from Calcutta as per the agreement with NEC. Silchar be developed as another Air hub for NE states, it being equidistant from NE capitals (except Sikkim).
- e) Ensure convenient daily air link from all operational airports of NER to Kolkata & Guwahati in quick phases.
- f) Incentivise private operators to start at least weekly flights to international destinations.

Annexure-I

Major works under execution in North Eastern Region

(Rs.Crores)

Sl. No	Airport	Scheme	Est. cost	Present Status	Amount due to NEC (60%)	Amt. Received	Remarks
1	Assam Silchar	Strengthening and extension of runway to 7500 ft, ground lighting facilities, ILS etc	31	Work commenced in Nov.2005 & likely to be completed by 07/07	18.56	-	
2	Dibrugarh	Strengthening & extension of runway to 8000ft. and associated work	14	Work awarded but couldn't commence due to land dispute with Defence authorities	8.40	-	Work likely to commence in Aug.2006 & completed by 08/07
		Construction of new Terminal Building	54.52	Work in progress	32.71	-	Work likely to be completed by 07/07
		Expansion of apron	10	Work in progress	6	-	Work likely to be completed by 07/07
3	Guwahati	Provision of aerobridge including associated works	12.4	Work in progress	7.44	-	Work likely to be completed during 2006-07
		Construction of additional parking stands for new airlines & isolation bay	20	Work taken up & likely to be completed during 2006/07	12	-	
4	Tripura Agartala	Construction of new control tower cum technical block	4	Drawing finalized & estimate under preparation	-	-	Work likely to be taken up during 2006-07

PAWAN HANS HELICOPTERS LTD.

AIR CONNECTIVITY BY HELICOPTERS IN NORTH EAST -PAWAN HANS

As of now a total of 6 Nos. helicopters are deployed by Pawan Hans with the following State Governments in the North Eastern Sector and 1 No. with the PSU as per the details given hereunder. These helicopters are provided to the respective State Govts. on long term lease basis and a contract to this effect is signed between PHHL and the respective State Govts. State Govts. pay directly to PHHL the charges i.e. Fixed Monthly Charges plus Hourly Flying Charges based on actual monthly utilization. State Govts. in turn gets 75% subsidy for its helicopter operations from MHA directly.

Existing Services:

Every day we operate 24 destinations cover 46 sectors and make 120 weekly flights in the states Arunachal Pradesh, Meghalaya, Tripura and Sikkim.

Arunachal Pradesh:

At present Pawan Hans has provided a Dauphin helicopter SA 365N to Govt. of Arunachal Pradesh (from Dec 95 onwards), which is being utilized by the State Govt. for passenger services connecting Itanagar with Guwahati, Tezu, Ziro, Roing, etc. The services by Dauphin helicopter are being run by the State Govt. on subsidized basis with 75% subsidy from MHA and balance 25% is being recovered from the passengers by

the State Govt. and deficit, if any, being met from State Govt. funds.

Pawan Hans has also provided a 26 seater Mi-172 helicopter to the State Govt. w.e.f. 20th August, 2002 for ferrying of passengers and carrying cargo (air maintenance). With excellent high altitude performance of Mi-172 helicopter, the State Govt. has been using the helicopter to connect high altitude places such as Tawang, Rupa, Bomdila etc. by helicopter for carrying men & materials. However, the helicopter is presently under overhaul at Kazan, Russia.

Meghalaya:

Pawan Hans has provided a Dauphin helicopter on wet lease to the Govt. of Meghalaya w.e.f. 15th February, 1999. The State Govt. has been operating daily passenger flights on Guwahati-Shillong-Tura sector and other flights within the state. The sector on which the state govt. is utilizing the helicopter are Guwahati, Tura, Shillong for running regular passenger services. The services are being run by the State Govt. on subsidized basis with 75% subsidy from MHA and balance 25% is being recovered from the passengers by the State Govt. and deficit, if any, being met from State Govt. funds.

Sikkim:

Pawan Hans has provided a 5 seater Bell helicopter on wet lease to the Govt. of Sikkim

since 31st October 1998. The State Govt. has been operating daily passenger/tourist flights on Gangtok-BagdograGangtok sector (6 days in a week) and other flights for carrying tourists. The services are being run by the State Govt. on subsidized basis with 75% subsidy from MHA and balance 25% is being recovered from the passengers by the State Govt. and deficit, if any, being met from State Govt. funds.

Tripura:

Pawan Hans has provided a Bell 407 helicopter 011 wet lease to the Govt. of Tripura w.e.f. 25th September, 2002. The State Govt. has been utilizing this helicopter for regular passenger services connecting Agartala, Dharmanagar, Kailashaar etc. and for other purposes within the state. The services are being run by the State Govt. on subsidized basis with 75% subsidy from MHA and balance 25% is being recovered from the passengers by the State Govt. and deficit, if any, being met from State Govt. funds.

Ministry of Home Affairs:

MHA has been utilizing Pawan Hans Dauphin helicopter since 1996. The helicopter is based at Guwahatl and is being used for carrying Ministers and Senior Officials of Central Govt. to various places in North East. However, for the time being From Dec. '05 onwards a Bell 407 helicopter has been deployed in place of Dauphin.

PSUs -

NHPC - w.e.f. 27 Oct 2000 - Bell 206. L4 - Dibrugarh

New Proposals:

In the past PHHL had also submitted proposals to Govt. of Nagaland & Mizoram for lease of helicopters on long term lease basis. Their approval/response is still awaited.

MAJOR PROJECTS LIKELY TO BE TAKEN UP DURING 11TH FIVE YEAR PLAN (COST MORE THAN RS 5 CRORES) AT AIRPORTS IN NORTH EAST REGION		
Scheme	11th Plan Provision	Remarks
NORTHEAST REGION		
AGARTALA#		
Expansion and strengthening of apron for parking of additional three A-321 and one ATR-72 class of aircraft with link taxiway, ramp area etc.	15	Estimates under preparation. Work likely to be awarded by 2006-07
Construction of new control tower cum technical block of 25/30m height, as per site condition	8	Estimates under preparation. Work likely to be awarded by 2006-07
Construction of cargo complex for 10000 tonnes (area 2000 sqm)	10	Planning stage
Provision of two passenger boarding bridges with modification works including civil and electrical	6	Planning stage
BARAPANI (SHILLONG)		
Construction of new terminal building for 100 passengers for operation of LCC (1500 sqm approx.) with car park for 100 cars and development of approach road.	40	Estimates under preparation. Work likely to be taken up in 2007-08.
Expansion of apron for parking of additional two ATR-72-500 class of aircraft with additional link taxiway in front of new terminal building	8	Planning stage. Work likely to be taken up in 2008-09.
Construction of residential quarters for AAI staff	5	Planning stage. Work likely to be taken up in 2007-08.
Strengthening / resurfacing of runway and associated pavements including development of runway strip, drainage system etc.	15	Planning stage. Work likely to be taken up in 2009-10.
DIBRUGARH		
Construction of new control tower cum technical block of 25/30m height at appropriate location	8	Planning stage. Work likely to be taken up in 2009-10.
Construction of new fire station cat.VII at appropriate location	4	Planning stage. Work likely to be taken up in 2009-10.
Acquisition of additional 227 acres of land as per master plan for ultimate development including construction of isolation bay.	12	Planning stage. Requisition yet to be given.
DIMAPUR#		
Construction of isolation bay and link taxiway	4	Work is being awarded.
Development of drainage system in coordination with State Govt. and deposit of money with State Govt. for river training work	10	Planning stage. Likely to be taken up by 2008-09
Provision of two passenger boarding bridges with modification works including civil and electrical	6	Planning Stage.
GUWAHATI#		
Construction of international terminal building for 500 passengers (15000 sqm) with two passenger boarding bridges, three escalators and three elevators, car park for 300 cars and allied facilities	110	Planning stage. Likely to be taken up by 2008-09.
Construction of additional parking stands for two B-777-300, four A-321	25	Planning stage. Likely to be taken up by 2008-09.
Strengthening and extension of runway by 550m Phase-II for operation of wide-bodied aircraft and strengthening of domestic apron and link taxiway	35	Planning stage. Likely to be taken up by 2008-09.

Annexure-III (Contd.)

Construction of international cargo complex for 10000 tonnes (2000 sqm area)	10	Planning stage. Likely to be taken up by 2009-10.
Development of four-lane approach road from national highway to international and domestic terminal building (5 km approx.)	2	Planning stage. Likely to be taken up by 2008-09.
Relocation of ARSR MSSR Radars.	12	Planning stage. Likely to be taken up by 2008-09.
Construction of part parallel taxiway	10	Planning stage. Likely to be taken up by 2008-09.
Acquisition of 297 acres of land as per master plan for ultimate development.	16	likely to be handed over in 2007-08
Construction of new control tower cum technical block of 30m height with reference to extended runway	15	Planning stage. Likely to be taken up by 2009-10.
Construction of administrative block for AAI and allied offices	5	Planning stage. Likely to be taken up by 2008-09.
Construction of new fire station category IX	5	Planning stage. Likely to be taken up by 2007-08.
IMPHAL#		
Expansion of apron and additional link taxiway for parking of four A-321 and part parallel taxiway	15	Planning stage. Likely to be taken up by 2008-09.
Provision of two passenger boarding bridges with modification works including civil and electrical	6	Planning stage.
ITANAGAR		
Construction of new airport for 50 seater aircraft operation excluding cost of land	150	Planning stage. Likely to be taken up by 2007-08.
JORHAT		
Construction of new terminal building complex for 400 passengers (plinth area 8000 sqm) with associated facilities	50	Planning stage. Likely to be taken up by 2008-09.
Expansion of apron for additional two A-320 and link taxiway	7	Planning stage. Likely to be taken up by 2009-10.
Acquisition of additional 20 acres of land from State Govt.	1.8	Planning stage. Likely to be taken up by 2007-08.
KAMALPUR		
Operationalization of airport for ATR operation including resurfacing of runway, apron, taxiway, expansion of terminal building, control tower, fire station etc.	35	Planning stage. Likely to be taken up by 2008-09.
KAILASHAHAR		
Operationalization of airport for ATR operation including extension and resurfacing of runway to 1400m, apron, taxiway, expansion of terminal building, control tower, fire station etc.	40	Planning stage. Likely to be taken up by 2009-10.
PASSIGHAT		
Operationalization of existing airport for ATR-72-500 operation		
strengthening of runway (1500 x 30m), apron (110m x 110m) and link taxiway and allied facilities	20	Planning stage. Likely to be taken up by 2009-10.
construction of new terminal building for 100 passengers, car park etc.	10	
Construction of fire station cum control tower category V	5	

Annexure-III (Contd.)

Provision of ground lighting facilities	1	
Provision of CNS facilities (DVOR, DME, ILS etc.)	2	
Construction of boundary wall, perimeter road	5	
Augmentation of water and power supply	2	
Construction of residential quarters	2	
RUPSI		
Operationalization of existing airport for ATR-72-500 operation		
strengthening of runway (1500 x 30m), apron (110m x 110m) and link taxiway and allied facilities	20	Planning stage. Likely to be taken up by 2008-09.
construction of new terminal building for 100 passengers, car park etc.	10	
Construction of fire station cum control tower category V	5	
Provision of ground lighting facilities	1	
Provision of CNS facilities (DVOR, DME, ILS etc.)	2	
Construction of boundary wall, perimeter road	5	
Augmentation of water and power supply	2	
Construction of residential quarters	2	
SILCHAR		
Expansion and modification of terminal building to make total area about 6000 sqm for 500 passengers by demolishing of existing garages and expansion of car park for additional 100 cars etc.	45	Planning stage. Likely to be taken up by 2009-10.
Expansion of apron for additional two A-321 and link taxiway	10	
LENGPUI		
Provision of enroute DVOR, DME	2	Planning stage.
Total	851.80	
Construction of three Greenfield airports at Gangtok (Sikkim), Itanagar (Arunachal Pradesh) and Chiethu (Kohima) (Nagaland)	1020	DPR ready for Sikkim airport (Rs.340 crores). DPR under preparation for Itanagar and Chiethu. Funding to be finalized by Govt. of India.

MAP OF AIRPORTS IN NER



INLAND WATER TRANSPORT

Inland Water Transport (IWT) is an all weather and reliable mode of transport through out the year and is best suited for movement of low value, high volume commodities such as coal, fly-ash, cement, jute, foodgrains etc. Reduction of congestion/accidents on roads and reduction of pollution may also justify movement of bulk cargo through IWT. However, due to its gradual decline, neither Shippers nor Policy Planners currently have enough confidence in this mode. A rational package of incentives for effecting modal shifts could be considered.

In the North-East, river Brahmaputra (Dhubri - Sadiya stretch 891 km), declared as National Waterway No. 2 (NW-2) in 1988, provides a sort of trunk route connectivity to the region from Haldia and Kolkata Ports through Bangladesh waterways. The feeder routes (tributaries) leading to NW-2 provides hinterland connectivity to the trunk route.

Under an IWT Protocol between India and Bangladesh for transit and trade through IWT mode, Indian vessels can transit through Bangladesh from Brahmaputra to Kolkata/Haldia ports (Map). The protocol route also connects Karimganj on Barak river to Kolkata (proposed NW-6 stretches from Bhanga to Lakhimpur). Indo-Bangladesh IWT Protocol was signed on 28.10.99 for a period of 2 years, with a provision for further renewal through mutual consent.

However, since 3rd Oct. 2001, the Protocol is being renewed in a piecemeal manner. For smooth connectivity, it is important to keep the protocol valid on a long terms basis say 5 years at a time.

2. Current Status of NW-2:

Infrastructure: IWT related infrastructure namely navigational channel, terminals and navigational aids are being provided by the Inland Waterways Authority of India (IWAI). The current status is as under:

- Floating terminals have been provided at Dhubri, Jogighopa, Pandu and Silghat.
- Navigational channel with least available depth of 2 m is maintained between Dhubri and Dibrugarh (768 km).
- Day navigational marks are maintained on the entire waterway while night navigational facilities have also been provided between Dhubri and Pandu (255 km).
- A fixed concrete permanent terminal capable of handling containers is being constructed at Pandu.

Cargo movement: The cargo currently being moved on the waterway are POL of Numaligarh

Refinery from Silghat to Kolkata, Coal from Jogighopa to Kolkata, bitumen from Haldia to Pandu, jute and paraffin begs from Dhubri to Kolkata. Further, tea from Pandu to Kolkata and cement from Kolkata to Pandu. Cargo movement on NW-2 has been showing an increasing trend in last 3 years:

Year	03-04	04-05	05-06
Mm tonne km	29	38	43

There are possibilities of new types of cargo transportation on NW-2 such as clinker, fly ash and lime stone from Farakka/Kolkata to Pandu, cement from Pandu to Haldia/Kolkata and movement of over dimensional cargo and project/construction material for hydro-electric dam projects coming up on Subansiri river which is an important tributary of NW-2. About 5 bn tonne km of cargo transportation is possible by 2025.

3. Time taken by IWT vessels:

Presently, the IWT cargo vessel move with an average speed of about 10 km/hour. Due to the absence of night navigational aids and mechanized cargo handling facilities at both the ends, voyage time of a cargo vessel between Kolkata and Pandu (1535 km) is about 60 days which, with well developed IWT infrastructure, can come down to about 20 to 25 days making IWT operations more viable.

4. Ongoing Efforts to Improve IWT System:

Though river "Brahmaputra" from Dhubri to Sadiya (891 km) was declared as a National Waterway in 1988, investment made for its development so far is:

<u>Year/Period</u>	<u>Investment/ Expenditure</u>
1988-99 to 1996-97 (upto 8th Plan)	Rs. 7.50 cr
1997-98 to 2001-02 (9th Plan)	Rs. 25.69 cr
2002-03 to 2005-06 (10th Plan- so far)	Rs. 95.79 cr

An Action Plan for making NW-2 fully functional by March 2008 by providing assured depth in navigational channel, night navigational aids and fixed/floating terminals at important places has been approved at a cost of Rs.203 crore. With this investment, the cargo throughput is estimated to reach 1.2 billion tonne km (btkm) by 2010 and 4.8 btkm by 2020.

5. River Barak - Proposed National Waterway No.6:

Govt. is considering declaration of River Barak from Lakhimpur to Bhanga (121 km) as a National Waterway (NW-6) requiring an investment of Rs.46 crore. Techno economic feasibility study has been completed. Salient features are given in Annexure- I.

6. Alternate route linking North-Eastern and Eastern India:

IWT link between India (Mizoram) and Myanmar can be established through Koladyne river (Annexure-II) for which techno-economic feasibility study has been conducted by MEA/ Govt. of Mizoram through RITES. Presently, MEA is exploring an alternate route for providing connectivity to North-East (Mizoram) from Kolkata. The proposed route is Kolkata to Sitwe (coastal route), Sitwe to Kaletwa (IWT) and Kaletwa to Mizoram (road). A suggestion has been made to the MEA that IWAI could be the project-implementing agency for IWT part.

7. Feeder routes to NW :

Ideally this should be done by the States utilizing their own Scheme and the Centrally Sponsored Schemes. However, since their technical capacity/expertise is limited, IWAI can take up Project preparation/Implementation/Monitoring etc on behalf of the States, provided there is consensus on this issue. North-East Council (NEC) could be the appropriate forum for evolving this consensus.

8. Recommendations:

- Renew Indo-Bangladesh IWT Protocol on long term basis (at least 5 years)
- Evolve Policy dispensation and Package of incentives for modal shift in favour of IWT especially for bulk cargo. Transport policy/ planning implications of this suggestion be examined by an expert group. Suggestions include viability gap funding of 20 paise per ton-km, extension of Inland Vessel Building Subsidy Scheme, IWT development fund for equity participation, SPV for vessel leasing, New scheme for mechanization of country crafts.
- Make NW-2 (Dhubri-Sadiya 891 km) fully functional
- Declare Barak River - as National Waterway No.6 and develop it.
- Support alternate route (Kaladan Multi Modal Project) connecting Mizoram and Myanmar (para 6 of IWT Chapter)
- Stronger and professional IWT Directorate in Assam holds the key to IWT prospects in the NER. Its Institutional strengthening is, therefore, urgent and necessary.

Salient Features of Proposed National Waterway No. 6 (Barak River)

Techno-Economic Feasibility conducted by
RITES Ltd.

Cost of development:

(Rs in cr)

Length of Waterway
121 km

Fairway development	22.00
Construction of terminals	23.00
Setting up of offices	1.00
TOTAL	46.00

Stretch Between Bhanga and

Lakhipur

State covered

Assam

Cargo identified:

Coal, tea, food grains, bamboo, paper and paper products, timber, parcel goods, sugar, salt, cement, edible oils, pulses, POL etc.

Waterway dimension proposed:

Bed width	40 m
Depth	1.6 m*
Side slope	1:5

Cargo projection:

* Depth would be improved to 2 m during Phase - II when depth in the Bangladesh Waterways also improves.

<u>Year</u>	<u>Projection</u> (in lakh tones)
1st year after development	6.34
5th year after development	8.62
10th year after development	10.53

Major works:

Procurement of 2 Cutter Suction Dredger,
1 Hydraulic Surface Dredger and 2
Survey launches.

Connectivity with Haldia and Kolkata Ports:

River Barak is connected with Haldia and Kolkata ports through waterways in Bangladesh. An IWT transit and trade protocol already exists between India and Bangladesh under which Indian vessels can transit from Karimganj to Haldia/Kolkata through specified Bangladesh waterways.

Terminal:

4 nos. (Bhanga, Badarpur, Silchar and Lakhipur)

Salient features of the proposed alternate route linking NER and Eastern Region

- The most viable and feasible route identified is as under:

Kolkata to Sittwe(Myanmar)	
Sea leg(coastal shipping)	539 km
Sittwe to Kaletwa (Myanmar)	
IWT on River Kaladan	225 Km
Kaletwa to Indian border (Mizoram)	
Highway	180
- **Specifications of Waterway(IWT):**

Bed width	37.5M
Depth below CD (LWL)	2.0 M
Side Slope	1:5
- **Specifications of Vessels :**

Coastal Shipping : 6000DWT of 124 m X 16.9 MX 9.5 M with a loaded draft of 7.2 M	
IWT : 260 Tonne capacity of 40M X 8.5 M X 2.3 M with a loaded draft of 1.5 M	
- **Loading Pattern in IWT vessel:**
 - o May to October; 260 Tonne
 - o November to April: 120 Tonne
- **Fleet Requirement:** 10 vessels of 260 Tonne capacity
- **Locations of Terminals:**
 - o IWT terminal at Sittwe: 54 M X 15.2 M Berth with approach jetty of 104 MX 9.8 M
 - o IWT terminal at Kaletwa : 54 M X 15.0 M Berth with approach jetty of 192 MX 9.6 M
 - o Port jetty at Sittwe: 219 M X 15.2 m with approach of 104 M X 9.5 M
- IWT Cargo throughput: 75000 Tonnes per year - Day time navigation only
- Total project cost: 49.24 US Million Dollar as on 2003:

Waterway:	19.31 US Million Dollars
Terminal:	24.75 US Million Dollars
Vessels:	5.18 US Million Dollars
- Annual Operation and Maintenance Cost: 5.18 US Million Dollars

MAP - IWT



POWER

Power Supply Position:

The Installed Capacity of NER as on 31.3.2006 is 2520.3 MW comprising 1153.1 MW hydro and 1311.2 MW thermal (including gas and diesel) and 56 MW from Renewable Energy Sources (Annexure-I). The NER had a power supply deficit of 8.6% (all India average-8.4%) for the period 2005-06 and Peak Deficit of 13.9% (all India average-12.3%).

2. Target for 10th Plan:

Planning Commission has set a generation capacity addition target of 1527.92 MW in NER during the Tenth Plan (41,110 MW in the whole country). The State-wise details of capacity addition target and achievement is given at Annexure - II. Project-wise status is given at Annexure-III.

Important incomplete projects (including not started/held up) are as follows: Tuirial HEP-60MW (NEEPCO), Loktak D/S- 90MW (NHPC), Bairabi HEP-80MW, Monarchak-280MW (NEEPCO), Dimapur-22.92MW (HFO based), Lakwa WHRU-37.2MW, Tipaimukh-1500MW (NEEPCO), Karbi Langpi-100MW, Myntdu St.I-84MW, Teesta-V-510MW (NHPC). Two Diesel based schemes in Meghalaya viz. Byrnihat (24 MW) and Mendipathar (24 MW) have been dropped by the State Govt.

3. AT & C Losses:

AT&C losses of NER during 2004-05 were very high at about 42% as compared to the all India average of about 34%. AT&C losses in Manipur, Assam, Nagaland and Sikkim were extremely high and need urgent measures.

Assam	39.31	Tripura	30.88
Manipur	88.56	Arunachal	37.30
Meghalaya	38.12	Mizoram	22.02
Nagaland	39.35	Sikkim	63.60

Source: MoP's Task Force Report on APDRP (September, 2006)

4. Hydro Power Initiative:

A 50,000 MW Hydro Electric Initiative was launched by Govt. of India in May, 2003. Preliminary Feasibility Reports (PFRs) have been prepared for 162 Hydro Electric Projects in the country as a whole (47,930 MW). Of these, 72 are in NER (31,885 MW).

Of 78 low tariff schemes (first Year tariff upto Rs 2.50/Kwh) with 34,020 MW taken up for preparation of DPR/implementation, 29 schemes (23,217 MW) are located in NER (Annexure-IV).

Major problems in the development of HEP in NER:

(a) Non-availability/delay in environment and/or forest clearance, identification of non-forest land, its acquisition, preparation and implementation of afforestation plans.

(b) Arunachal has decided that hydro power projects in the State would generally be developed as run-of-the-river projects. Assam wants flood moderation (huge flood related losses every year) and irrigation components also in such projects.

National Water Policy 2002 has identified flood mitigation as one of the prime objectives of river valley management. Accordingly, Brahmaputra Board had planned originally a single high dam as a storage project. On objection from Arunachal, the proposal was later modified to three-stage cascade development to avoid large submergence and minimize the environmental implications.

ROR is not a sensible alternative to big reservoirs, which alone would ensure full & round-the-year generation of power potential created, mitigate floods in Assam (causing heavy losses every year), provide irrigation & drinking water, generally regenerate jhoom-damaged forests etc. The apprehension of China diverting

large volume of Brahmaputra water is another major imperative for storing large volume of water during monsoon. Incidentally, Ranganadi HEP with 405 MW capacity, generates power for 1-2 hours during off-monsoon season, the reservoir being small due to the low dam height (This HEP needs to be evaluated for drawing lessons). GOI has, therefore, to incentivise Arunachal in permitting big reservoirs (than ROR) through packages such as improvement of connectivity in a big way, loan/grant for their equity participation in joint ventures, T& D lines etc.

(c) Arunachal has 21,800 MW of commercially exploitable hydro electric potential (Annexure-IV). This huge potential could not be exploited so as to provide the much needed cheap power and huge amount of revenue on the sales of surplus power to other States. Therefore, Arunachal signed MoU with five private companies involving 11 projects and 8,390 MW (Annexure-X). Following this action, several MoUs has been signed with CPSUs also (NHPC, NEEPCO, NTPC) totaling 10,230 MW (Annexure-X).

For these MoUs to fructify, GOI has to provide grant or enable state govt. to raise market loan for their equity participation with private/public companies. With equity participation of 11%

with three private developers, fund requirement of Arunachal would be approximately Rs.1820 crore. With increased equity participation of 26%, Rs.4300 crore would be required. For equity participation of 49% with NHPC, fund requirement would be RS.6543.58 crore (Details at Annexure-VIII).

Apprehension has been raised that (a) MoUs signed with private companies without inviting national bid may be against the Electricity Act, (b) power so generated may need CPSUs for evacuation to long distances, (c) MoUs would not be implemented seriously unless and until sufficient earnest money and penal clause for delay in execution is provided and enforced, on both private and public companies.

(d) Implementation of Tipaimukh Dam Project (1500 MW) and Loktak downstream HE Project (90 MW) in Manipur could not be started due to insurgency, additional cost on account of security, construction of diversion roads, high NPV of forest under submergence etc.

(e) Hydro schemes in NE Region face geological surprises. Ongoing Kameng HE Project (600 MW) is such a project.

(f) Problems encountered in some projects were due to inadequate Survey & Investigation. To initiate even the project investigation work, approach roads, railways, telecommunication, air

services, electricity supply, communication facilities (fax, internet etc) are required. A trans Arunachal Highway for example has been suggested in the Highway Chapter.

(g) Presently only Meghalaya and Assam have their electricity boards (Assam SEB has since been corporatised) while other states in NER have only Govt. departments associated with power.

5. Generating Capacity Addition Programme in 11th Plan:

Tentative capacity addition programme of 5,615 MW has been envisaged in NER for the 11th Plan. The state-wise/project-wise details are given at Annexure-V.

6. Power Evacuation from North East:

(a) Even with the accelerated growth in local demand, major portion of hydro power generation need to be evacuated to power deficit regions in the North/West. Keeping in view the requirements of evacuation of power, the right of way constraints in the "chicken neck" area and the cost implications, a long-term transmission system Master Plan for evacuation of power from NER has been developed by CEA. The main approach is to develop hydro projects and pooling points for individual basins and then further pooled to major pooling points for onward dispersal/transmission through high

capacity HVDC/AC corridors. The major basins are Lohit Basin, Dibang Valley, Siang Basin, Subansiri Basin, Kameng Valley etc. Vishwanath Chariyali and Siliguri have been identified as the major pooling points. For onward transmission of power to outside NER, a ± 800 kV HVDC Bishwanath Chariyali-Siliguri-Agra bi-pole has been planned (Map).

(b) The regional transmission systems in each region of the country are built by PGCIL under the Central Sector. Per unit cost of regional transmission in NER is much higher due to (i) uneven terrain, (ii) law & order problem, and (iii) inherently low PLF of hydro stations. CERC has capped the regional transmission charges in NER at 35 paise/kWh and as a result, while the NER pays the highest regional transmission charges, PGCIL is still not recovering its full transmission charges and suffering financial losses. PGCIL is, therefore, shy of making further investment in the NER transmission system and the strengthening requirements in the regional/inter-state transmission system is suffering. It is, therefore, necessary to evolve a mechanism for appropriate recovery on investment within reasonable transmission tariff.

(c) Urgent strengthening requirements in the regional system have been identified and two schemes namely, NER System Strengthening Scheme - I and II have been evolved as follows:

NER System Strengthening Schemes - I

- (i) 132 kV Kopili HEP - Khandong HEP 2nd circuit
- (ii) Extension of Kopili S/S by 1x160 MVA, 220/132 kV transformer (3x53.3 MVA single phase units).
- (iii) LILO of Dimapur (Nagaland) - Kohima 132 kV S/C at Dimapur (PG)
- (iv) Augmentation of Dimapur (PG) S/S by 1x100 MVA, 220/132 kV transformer.

NER System Strengthening Schemes - II

- (i) Second 315 MVA 400/220 kV transformer at Misa 400 kV substation of PGCIL (Proposed to be included under Kameng HEP transmission scheme)
- (ii) Additional 100 MVA 220/132 kV transformer at Mariani 220 kV substation of Assam (AEGCL will execute the work).
- (iii) 132 kV Itanagar-Gohpur S/C line (to be executed under funding from DONER).
- (iv) 132 kV Agia-Nanglabibra S/C line on D/C towers (Proposed by MeSEB under funding from DONER, Assam has no objection for execution of 40 km out of 110 km line of Assam portion).

In view of the urgency, PGCIL has decided to go ahead with implementation of Scheme-I within

existing transmission tariff ceiling of 35 paise/kWh for NER.

(d) Strengthening of the regional transmission system is being planned along with the power evacuation system for Kameng/Subansiri. This includes:

(i) LILO of Depota-Gohpur 132kV S/C at Bishwanath Chariyali

(ii) 2x200MVA, 400/132kV s/s at Bishwanath Chariyali

(iii) 400/220kV s/s at Rangia through LILO of Balipara-Bongaigaon 400kV line

(iv) 220kV Rangia-Guwahati D/C line

(v) Second 315 MVA 400/220kV transformer at Misa 400kV s/s of PGCIL

(e) The 220 kv Misa-Byrnihat D/C line along with 220/132 kV S/S (100 MVA) has been planned as a JV project of MeSEB and PGCIL. This scheme would be partly funded by DONER. The execution is being scheduled for commissioning by 2008.

(f) Comprehensive transmission system has been evolved for development in a phased manner and components associated with specific generation and transmission system from the pooling stations up to the depooling stations have been identified. As the transmission system would

benefit NER and other regions, long-term commitment for transmission charges for each of these transmission systems have also been identified (Annexure-VI).

(g) Problematic incomplete projects in the State Sector transmission are in Assam and Manipur as given below:

ASSAM

(i) 132 kV Umiam Stg-IV - Sarusajai D/C is an inter-state line between Assam and Meghalaya. Meghalaya portion of this line has been completed, but ASEB (now AEGCL - Assam Electric Grid Corporation Limited) has been delaying completion of the portion of the line (8.9 kms) in Assam.

MANIPUR

(i) 132 kV Loktak - Jiribam -I line is out of service since 1999 due to stolen conductor and affected states are Manipur, Mizoram, Meghalaya, Nagaland, Tripura and south part of Assam. Manipur Electricity Department should expedite.

7. Power Sector Reforms:

Assam, Tripura and Meghalaya have constituted their State Electricity Regulatory Commission (SERC). Manipur and Mizoram have constituted a Joint ERC (JERC) while Nagaland and Arunachal Pradesh are yet to take initiative in

setting up their SERCs. So far Assam SERC is functional. As regard unbundling, Assam and Tripura have unbundled and formed separate entities for Generation, Transmission & Distribution.

8. Accelerated Power Development and Reform Programme (APDRP) Status: GOI

introduced the APDRP for initiating financial turnaround in performance of state owned power sector for improvement in sub-transmission & distribution system in the country. State wise details (NER) of project outlays, funds utilized and physical performance under APDRP as on 31-12-2006 is given below:

metering has been done so far. 21% feeder metering in Manipur is quite low in comparison to other states. The percentage of consumer metering is low at 50% and 61% in Meghalaya & Nagaland. The distribution transformer metering in almost all states is very low and needs to be completed in time bound manner to reduce AT & C losses.

9. Rural Electrification in NER:

73% of total inhabited villages (29615) have been electrified (2001 census) as against national average of 79.4%. Similarly, 24% of rural households (1.45 million) have electricity as against national average of 43.52%. 7252 pump sets have been energized in the NE States up to

State	Project Outlays (Rs crores)	Amount released (Rs crores)	Total Utilisation (Rs crores)	11kv feeder metering (%)	Consumer Metering (%)	DT Metering (%)
Arunachal	82.69	36.68	25.44	0	46	-
Assam	650.73	349.28	358.92	100	95	7
Manipur	141.62	11.67	2.67	21	82	-
Meghalaya	227.44	90.45	60.63	100	50	26
Mizoram	108.74	78.01	67.31	72	100	2
Nagaland	122.27	68.58	52.83	85	61	-
Tripura	146.74	54.31	47.84	100	81	-
Sikkim	152.09	154.73	146.44	100	100	39

Fund utilization in Meghalaya, Arunachal & Nagaland against amount released for the programme is very poor compared to other NE states. Arunachal has not taken up the 11kv feeder metering while only 46% consumer

31.12.2006. State-wise details are given at Annexure- VII. RGGVY would enable the North Eastern States to complete the rural household electrification programme in an accelerated & time bound manner.

10. Recommendations:

A. Generation:

(i) Complete the incomplete projects of 10th plan in the 11th plan along with the capacity addition programme for the 11th plan (Annexure-III & V).

(ii) Do not count cost of security, diversion of roads etc towards the project cost and fund through Govt. Budgetary Support.

(iii) Fund DPR preparation of promising power projects.

(iv) Review urgently the recent norms of Net Present Value for assessing the cost of Forest Diversion has added huge burden on the storage hydro schemes, making them unviable.

(v) Considering low density of the population in NE states, local demand would be better served with smaller projects feeding independent local grids, minimizing T&D costs and logistic problems.

(vi) Hydel Power in Arunachal:

Arunachal has decided not to encourage HE Project involving large storage. As there are very few suitable sites for construction of multipurpose storage projects, Arunachal should allow it for providing attendant benefits like full

generation of power round the year, irrigation, drinking water, flood control, etc. to the other constituents of NE States also. Arunachal could be compensated with a package such as mentioned at para 4(c) & (f) of the Power Chapter.

(vii) Constitute an empowered committee for clearance of project to reduce delay in allotment, if need be through Centre's constitutional role over inter-state rivers and river basins.

(ix) Utilize part of the revenue generated through sale of free power for displaced people.

(x) Treat land submergence in the storage based power projects as equity.

(xi) Identify zone for easily implementable projects and cluster of projects in a single region to reduce both infrastructure and transmission costs.

(xii) Undertake Survey & Investigation of HE Projects through experienced hydro-power developers to minimize the geological uncertainties during construction. Electronically operated Theodolite Survey Machines (EDM) along with lightweight drilling machines need to be used for geological surveys. Global Positioning System (GPS) also to be provided.

(xiii) Convert identified Meter gauge to Broad Gauge rail links & extend rail network, develop adequate road network & strengthen existing roads along with construction of bridges, air services, effective telecommunication for smooth implementation of identified HE projects (Annexure-IV).

B. Transmission and distribution:

(i) Build high capacity lines for evacuation of power from various HEPs. Devise modalities for commitment to pay transmission charges accordingly. It would be desirable to adopt the national approach in which beneficiaries outside NER share the transmission charges of identified transmission system in NER based on power allocation from NER generation projects.

(ii) Strengthen transmission and distribution system to provide uninterrupted power supply

particularly to industrial Areas. New Sub-transmission and adequate distribution infrastructure through APDRP would be of great help.

(iii) Bring about greater competition in creation of transmission assets, increase debt component and move to competitive bidding to reduce transmission charges in NER.

C. AT&C Losses:

AT&C losses of NER being very high in comparison with all India averages, implement suggestions given at Annexure-IX.

D. User charges & Reforms:

Rationalise user charges. Presently, it is quite low. Moreover, create power utilities in all states (only Meghalaya and Assam have done so) to develop expertise in various areas of power sector.

Annexure-I

State-wise details of installed capacity of NER (as on 31.3.2006)

(All figures in MW)

State	Hydro	Thermal	Renewable Energy Sources	Total
Assam	333.0	797.7	0.2	1130.9
Arunachal Pradesh	116.5	36.9	26.0	179.4
Meghalaya	258.6	28.1	1.5	288.2
Tripura	78.0	165.3	1.1	244.5
Manipur	82.5	71.4	4.0	157.9
Nagaland	78.5	21.0	3.2	102.7
Mizoram	38.0	67.9	10.9	116.8
Central Unallocated	128.0	55.9	0.0	183.9
Sikkim	40.0	67.0	9.1	116.1
Total	1153.1	1311.2	56.0	2520.3

Annexure-II

State-wise details of capacity addition target and achievement during 10th plan

S.No.	State/Central Sector	Generation Capacity Addition (MW)			
		Target	Achievement		
			From 2002-03 to 2005-06	Expected (2006-07)	Total
1	Assam	138.00	-	100.00	100.00
2	Manipur	18.00	18.00	-	18.00
3	Meghalaya	132.00	-	-	-
4	Mizoram	102.92	22.92	-	22.92
5	Tripura	42.00	63.00	-	63.00
6	Arunachal Pradesh	-	-	-	-
7	Nagaland *	-	-	-	-
A	State Sector	432.92	103.92	100.00	203.92
B	Central Sector	585.00	25.00	-	25.00
	Sikkim **	510.00	-	-	-
	Total	1527.92	128.92	100.00	228.92

* Capacity addition of Likhim Ro (8 MW) not included

** Teesta St.V HEP by NHPC is slipping to 2007-08.

Status of state and project-wise capacity addition programme during the 10th Plan

S.No.	Project	MW	State	Commissioning schedule
1.	NEEPCO			
2.	Kopili II	25MW	Assam	Commissioned
	Tuirial HEP	60MW	Mizoram	Work held up - high cost/ law & order problem
3.	Tripura GT (Monarchak)	280MW	Tripura	ONGC (in JV with IL&FS & State Govt. of Tripura) is now taking up a project with capacity of 750 MW. Scheduled to be commissioned during 11th Plan.
4.	NHPC			
	Teesta - V	510MW	Sikkim	Slipping to 11th Plan (2007-08).
5.	State Sector			
	Karbi Langpi	100MW	Assam	Works restarted in Oct. 04. NEC has sanctioned Rs.100 Cr, and Assam agreed to give guarantee for PFC loan of Rs. 125 Cr. Scheduled now for commissioning in 2007-08.
6.	Lakwa WHRU	37.2MW	Assam	Govt. of Assam has kept a provision of Rs.100 cr, Balance funds to be arranged through PFC. LOI for execution of the project placed on BHEL. Project Slipping to 11th Plan.
7.	Leimakhong DG	18MW	Manipur	Commissioned
8.	Bairabi Dam	80MW	Mizoram	Works not yet started. Posed for ADB funding.
9.	Myntdu St.I	84MW	Meghalaya	Scheduled for commissioning in 2008-09
10.	Rokhia Gt Ext	21MW	Tripura	Commissioned on 31.3.2006
11.	Rokhia GT	21MW	Tripura	Commissioned on 11.07.2002.
12.	Baramura GT	21MW	Tripura	Commissioned on 27.11.2002.
13.	Dimapur (HFO based)	22.92MW	Nagaland	Rs.32 crore released under NLCPR and spent on civil work. Due to non-availability of balance fund, project work short closed and handover to Nagaland on "as is where is basis" in May 2006. Cost of power too high.
14.	Bairabi DGPP	22.92MW	Mizoram	Commissioned on 07.05.2004.
15.	NHPC Loktak D/S	90MW	Manipur	Project has become unviable due to costs of NPV, road, security etc. Being reconsidered.
16.	NEEPCO			
	Tipaimukh	1500MW	Manipur	A solution is being considered.

- i) The Barnihat(24 MW) & Mendipathar (24 MW) project in Meghalaya were included in the target of 10th Plan but subsequently dropped.
- ii) The Rokhia GT Extn.(21 MW) project in Tripura is an additional project and was not included in 10th Plan target.
- iii) Dimapur HFO based DPGP (22.92MW) in Nagaland & Loktak D/S (90MW), Tipaimukh(1500MW) projects in Manipur were not included in 10th Plan target.

Low Tariff Hydro Projects proposed for preparation of DPR/Implementation

S.No.	Scheme	State	IC (MW)	First Year Tariff (Rs./Kwh)	Work of Preparation of DPR/implementation
DPR WORK ALREADY ENTRUSTED					
1	Etalin	Ar. Pradesh	4000	2.17	NTPC
2	Attunli	Ar. Pradesh	500	2.35	NTPC
3	Naying	Ar. Pradesh	1000	1.18	IPP
4	Tato-fl	Ar. Pradesh	700	1.48	IPP
5	Hirong	Ar. Pradesh	500	1.62	IPP
6	Demwe	Ar. Pradesh	3000	1.97	NEEPCO
7	Oju-II	Ar.Pradesh	1000	1.46	NEEPCO
8	Oju-I	Ar. Pradesh	700	2.08	NEEPCO
9	Naba	Ar.Pradesh	1000	2.14	NHPC
10	Niare	Ar.Pradesh	800	2.02	NHPC
11	Kameng Dam	Ar.Pradesh	600	2.29	NEEPCO
12	Talong*	Ar.Pradesh	300	2.24	NEEPCO
13	Bhareli-II	Ar.Pradesh	600	1.67	NEEPCO
14	Bhareli-I	Ar.Pradesh	1120	1.85	NEEPCO
15	Kapak leyak	Ar.Pradesh	160	1.74	NEEPCO
16	Hutong	Ar.Pradesh	3000	1.28	Not allotted
17	Kalai	Ar.Pradesh	2600	1.01	Not allotted
18	Badao*	Ar.Pradesh	120	2.32	NEEPCO
19	Dibbin	Ar.Pradesh	100	2.23	NEEPCO
20	Umduna	Meghalaya	57	1.68	CWC
21	Selim	Meghalaya	170	2.02	CWC
22	Mawhu	Meghalaya	120	1.4	NEEPCO
23	Nongkolait	Meghalaya	120	1.97	MeSEB
24	Nongnaw	Meghalaya	50	2.44	MeSEB
25	Rangmaw	Meghalaya	65	2.32	MeSEB
	TOTAL	(NER)	22382		
1	Lachen	Sikkim	210	2.35	NHPC
2	Dikchu	Sikkim	105	2.15	IPP
3	Panan	Sikkim	200	2.15	IPP
4	Teesta-I	Sikkim	320	1.82	IPP
	TOTAL	(Sikkim)	835		

* DPR Received

List of projects for likely benefits during 11th plan (Tentative)

Sl. No.	PLANT NAME	STATE	AGENCY	SECTOR	ULTIMATE CAPACITY (MW)	BENEFITS 11th Plan (2007-12)
	HYDRO					
1	TEESTA III	SIKKIM	Teesta Urja	P	1200	600
2	SADAMANDERR	SIKKIM	GATI	P	71	71
3	CHUJACHEN	SIKKIM	GATI	P	99	99
4	BHASMEY	SIKKIM	GATI	P	51	51
5	TEESTA V	SIKKIM	NHPC	C	510	510
6	KAMENG	AR.PR.	NEEPCO	C	600	600
7	SUBANSIRI LOWER	AR.PR.	NHPC	C	2000	2000
8	MYNTDU Si-I	MEGHALAYA	MeSEB	S	84	84
9	NEW UMTRU	MEGHALAYA	MeSEB	S	40	40
	SUB TOTAL (HYDRO)					4055
	THERMAL					
1	BONGAIGAON EXT	ASSAM	NTPC	C	750	750
2	TRIPURA GAS	TRIPURA	ONGC	C	750	750
3	LAKWA WH	ASSAM	ASGENCO	S	37.2	37.2
4	DIMAPUR DG	NAGALAND	Elct.Deptt.	S	23	23
	SUB TOTAL (THERMAL)					1560
	TOTAL					5615

Transmission System Scheme

(Rs. in crore)

S. N.	Scheme/ Transmission System	Estimated Cost	Target Year
1	Tripura gas 1100 MW	2150	2008-09
	Tripura gas-Silcher-Bongaigaon 400kV D/C with higher size twin conductors	2000	
	400/132kV at Tripura gas generation switchyard and 132kV lines to grid s/s	70	
	400/132kV substation at Silcher and 132kV lines to grid s/s	80	
2	NR System for import	900	2008-09
	Bongaigaon-Siliguri and Purnea-Biharsharif 400kV D/C quad	900	
3	Bongaigaon Thermal 500 MW	300	2010-11
	Bongaigaon Th - Bongaigaon PG 400kV D/C	100	
	NER system strengthening with Bongaigaon	200	
4	Evacuation System for Kameng HEP 600 MW and Subansiri HEP 2000MW	12500	2009-11
	Kameng - Balipara (via Bishwanath Chariyal) 400kV D/C	300	
	Subansiri Lower-Bishwanath Chariyal 400kV D/C higher size twin conductor Line-1	400	
	Subansiri Lower-Bishwanath Chariyal 400kV D/C higher size twin conductor Line-2	400	
	NER system strengthening with Subansiri	400	
	Creation of Bishwanath Chariyal pooling station	3000	
	Bishwanath Chariyal - Agra 800kV, HVDC bi-pole of 3000 MW with line, line capacity 6000 MW (the line to be on two towers in chicken-neck area, each tower of bi-pole specification)	8000	
5	Siang Middle HEP 1000 MW	450	2012-14
	Siang Middle - Subansiri Lower 400kV D/C	300	
	NER system strengthening with Siang Middle	150	
6	Tipaimukh HEP 1500 MW	1750	2012-14
	400/220kV at Tipaimukh generation switchyard	50	
	Tipaimukh - Silcher - Misa 400kV D/C quad	700	
	Misa - Bishwanath Chariyal 400kV D/C	100	
	Misa - Bongaigaon 400kV D/C	400	
	Tipaimukh - Imphal - Dimapur 220kV D/C	300	
	NER system strengthening with Tipaimukh	200	
7	Teesta-I, II, III, IV, VI in Sikkim 2700 MW	650	
	Teesta-Gen/ PP1 - Siliguri 400kV D/C quad	300	2011-12
	Teesta-Gen/ PP2 - Bidhan Nagar 400kV D/C quad	350	2012-14
8	Phunatsanchu-I (1000 MW), Phunatsanchu-II (1000 MW) and Mangdhechu (600 MW) in Bhutan	450	
	Bhutan Gen/ PP - Siliguri 400kV D/C quad	200	2011-12
	Bhutan Gen/ PP - Bidhan Nagar 400kV D/C quad	250	2012-14
9	800kV HVDC from Siliguri	4000	
	3000 MW 800kV HVDC modules at Siliguri and Agra	2400	2011-12
	Bidhan Nagar - Begusarai - Sasaram 400kV D/C quad with SC and Begusarai s/s	1600	2012-14
	Gross Rs Crores	23150	

State-wise details of Rural Electrification in NER

States	Total Inhabited villages (as per 2001 census)	Villages electrified (as on 31.8.2006) %	No. of households (rural) (Census 2001)	Households having electricity (rural) (2001 Census) (%)	Pump sets energized (as on 31.8.2006)
Assam	25124	19741(78.6%)	4220173	697842(16.54%)	3675
Arunachal Pradesh	3863	2195(56.8%)	164501	73250(44.53%)	-
Manipur	2315	1942(83.9%)	296354	155679(52.53%)	45
Meghalaya	5782	3428(59.3%)	329678	99762(30.26%)	65
Mizoram	707	570(80.6%)	79362	35028(44.14%)	-
Nagaland	1278	823(64.4%)	265334	150929(56.67%)	194
Sikkim	450	425(94.4%)	91723	68808(75.02%)	-
Tripura	858	491(57.2%)	539680	171359(31.75%)	3273
NER	40377	29615(73.3%)	5986805	1452657(24.26%)	7252

Annexure-VIII

FUND REQUIREMENT FOR EQUITY PARTICIPATION BY THE STATE GOVT. FOR MEGA HEP

(Rs. in crore)

Sl. No	Name of project	Estimated Cost	Equity Participation	Phasing of fund during the 11th Five Year plan					Total	Remarks
				2007-08	2008-09	2009-10	2010-2011	2011-12		
	(Allotted to Private Developers)									
1	Naying HEP(1000MW)	3016.96	292.00	1.50	2.00	2.00	90.00	196.50	292.00	Allotted to M/S D.S.Constructions Ltd.at 11% equity.Discussion on for increasing equity to 26%.Under S & I.
2	Tato-IIHEP(700MW)	2608.60	252.48	1.50	2.00	2.00	90.00	156.98	252.48	Allotted to M/S Reliance Energy Ltd.at 11% equity.Discussion on for increasing equity to 26%. Under S & I.
3	Hirong HEP(500MW)	2072.78	200.62	1.50	2.00	2.00	70.00	125.12	200.62	Allotted to M/S Jaiprakash Associates Ltd.at 11% equity.Discussion on for increasing equity to 26%.Under S & I.
4	SiyomHEP(1000MW)	4699.81	454.94	45.00	90.00	90.00	100.00	129.94	454.94	Allotted to M/S Reliance Energy Ltd.at 11% equity.Discussion on for increasing equity to 26%. DPR ready.
5	Siang Lower HEP(1600MW)	6400.00	619.52	60.00	100.00	120.00	150.00	189.52	619.52	Allotted to M/S Jaiprakash Associates Ltd.at 11% equity.Discussion on for increasing equity to 26%.DPR at final stage.
	Total	18798.15	1819.56	109.50	196.00	216.00	500.00	798.06	1819.56	

(Rs. in crore)

Sl. No	Name of project	Estimated Cost	Equity Participation	Phasing of fund during the 11th Five Year plan					Total	Remarks
				2007-08	2008-09	2009-10	2010-2011	2011-12		
	(Allotted to NHPC)									
1	Dibang Multipurpose Project(3000MW)	14530.48	6543.58	500.00	800.00	1000.00	1500.00	2743.58	6543.58	Allotted to NHPC Ltd.on Joint Venture with State Govt.with equity participation of State at 49%. DPR ready.
	Total	14530.48	6543.58	500.00	800.00	1000.00	1500.00	2743.58	6543.58	
	Grand Total	33328.63	8363.14	609.50	996.00	1216.00	2000.00	3541.64	8363.14	
	Total	18798.15	1819.56	109.50	196.00	216.00	500.00	798.06	1819.56	

FUND REQUIREMENT FOR EQUITY PARTICIPATION BY THE STATE GOVT. FOR MEGA HEP IN THE EVENT OF INCREASE OF EQUITY TO 26%

Sl. No	Name of project	Estimated Cost	Equity Participation	Phasing of fund during the 11th Five Year plan					Total	Remarks
1	Naying HEP (1000MW)	3016.96	690.19	1.50	2.00	2.00	270.00	414.69	690.19	Allotted to M/S D.S.Constructions Ltd. Discussion on for increasing equity to 26%
2	Tato-IIHEP (700MW)	2608.6	596.77	1.50	2.00	2.00	230.00	361.27	596.77	Allotted to M/S Reliance Energy Ltd. Discussion on for increasing equity to 26%
3	Hirong HEP (500MW)	2072.78	474.18	1.50	2.00	2.00	190.00	278.68	474.18	Allotted to M/S Jaiprakash Associates Ltd. Discussion on for increasing equity to 26%
4	Siyom HEP (1000MW)	4699.81	1075.31	100.00	150.00	150.00	200.00	475.31	1075.31	Allotted to M/S Reliance Energy Ltd. Discussion on for increasing equity to 26%
5	Siang Lower HEP (1600MW)	6400	1464.32	150.00	250.00	300.00	300.00	464.32	1464.32	Allotted to M/S Jaiprakash Associates Ltd. Discussion on for increasing equity to 26%
Total		18798.15	4300.77	254.50	406.00	456.00	1190.00	1994.27	4300.77	

Measures required to be taken to reduce AT&C Losses

a) Technical Measures

- Installation of Efficient meters
- Up gradation and strengthening of the weak distribution system
- Increase in HT:LT Ratio
- Relocation of distribution sub-stations and /or provision of additional distribution sub-stations
- Installation of lower capacity distribution transformers to serve a smaller number/ cluster of consumers and substitution of distribution transformers with those having lower no-load losses
- Installations of shunt capacitors
- Adoption of High Voltage Distribution System (HVDS)
- Regular maintenance of distribution network
- GIS mapping of sub transmission and distribution network including compilation of data

b) Commercial Measures

- Improvement in metering and billing
- Improvement in revenue collection
- Energy accounting and auditing

c) Management Measures

- Adoption of energy accounting and auditing
- Proper network planning for future expansion
- Preparation of long-term plans on regular basis for phased strengthening and improvement of the distribution systems along with associated transmission system
- Training of employees

d) Policy Measures

- Strengthening the provisions relating to theft of electricity in the Electricity Act, 2003.
- Setting up of vigilance and legal measures in accordance with the Electricity Act 2003, setting up of special courts, police stations, etc.
- Implementation of the Accelerated Power Development and Reforms Programme (APDRP) for upgradation and strengthening of sub-transmission and distribution system and providing incentive for reducing cash losses by SEB's/ Utilities.

MoA signed with CPSUs (up to November 2006)

Sl.No	Name of HE Project	Installed Capacity in MW	Remarks
NHPC Ltd.			
1	Tawang-I	750	MoA on BOOM basis (signed on 21/09/06)
2	Tawang-II	750	MoA on BOOM basis (signed on 21/09/06)
3	Dibang Multipurpose	3000	MoA on BOOM basis (JV signed on 21/09/06)
NEEPCO Ltd.			
4	Kameng-I	1120	MoA on BOOM basis (signed on 21/09/06)
5	Pare	110	MoA on BOOM basis (signed on 21/09/06)
NTPC Ltd.			
6	Etalin	4000	MoA on BOOM basis (signed on 21/09/06)
7	Attunli	500	MoA on BOOM basis (signed on 21/09/06)
	Total	10230MW	

MoA signed with Private Power Developers (up to November 2006)

Sl.No	Name of HE Project	Installed Capacity in MW	Remarks
Reliance Energy Ltd.			
1	Siyom	1000	MoA on BOOT basis (signed on 22/02/06)
2	Tato-II	700	MoA on BOOT basis (signed on 22/02/06)
JP Associates Ltd.			
3	Siang Lower	1600	MoA on BOOT basis (signed on 22/02/06)
4	Hirong	500	MoA on BOOT basis (signed on 22/02/06)
DS Constructions Ltd.			
5	Naying	1000	MoA on BOOT basis (signed on 22/02/06)
Bhilwara Energy Ltd.			
6	Nyamjuungchhu Stage-I	98	MoA on BOOT basis (signed on 27/10/06)
7	Nyamjuungchhu Stage-II	97	MoA on BOOT basis (signed on 27/10/06)
8	Nyamjuungchhu Stage-III	95	MoA on BOOT basis (signed on 27/10/06)
Mountain Fall India Pvt.Ltd.			
9	Kalai-I	1450	MoA on BOOT basis (signed on 23/11/06)
10	Hutong-II	1250	MoA on BOOT basis (signed on 23/11/06)
11	Kameng-II	600	MoA on BOOT basis (signed on 23/11/06)
	Total	8390MW	

MAP- TRANSMISSION SYSTEM & POWER STATIONS



Financial Requirements

Financial requirement of various projects suggested, is estimated as follows:

(Rs. Crore)

Sector [*]	Priority		Total cost	GBS for 11th Plan	Likely Availability*
Highways	1	SARDP-NE (phase A)	7523#	5352	
	2	Trans Arunachal Highway	1500	1500	
	3	Road links in Manipur	560	560	
	4	Dhola-Sadia Bridge	550	550	
	5	SARDP-NE (Phase B)\$			
		Sub Total	10133	7962	3500¹
Civil Aviation	1	Two Green field airports ²	680+	340	
	2	Expansion and modification of existing airports	920@	460	
		Sub Total	1600	800	100.1
Inland Waterways	1	Development of NW-2	203	125	
	2	Proposed NW-6	46	46	
		Sub Total	249	171	379.5[^]
Railways	1	Ongoing Projects (page 57)	4746	4746	
	2	Azra-Byrnihat (NL)	200	200	
	3	Sivok-Giellikhola (NL)	300	300	
	4	Bhairabi-Aizwal(NL)	530	530	
	5	Dimapur-Zubza (NL)	850	850	
	6	Murkongselek-Passighat (NL)	300	300	
	7	Agartala-Akhura (NL)	40	40	
	8	Extension of Lumding-Badarpur GC	180	180	
	9	Guwahati Bye Pass Line (NL)	200	200	
	10	Rail Siding and Warehouse ³	10	10	
		Sub Total	7356	7356 !	3805
Power	1	Equity Participation	18000	1200⁴	
	2	Transmission System	18750	1300 ⁵	
		Sub Total	27114	2500	3500
		Grand Total	46452	18789	11284.6

* Connectivity for Border Trade (chapter 3) not included due to cost implications and lower priority

^{*}At least five times BE 2007-08 (BE = specific allocation for programme in NE or 10% of Ministry Total)

Includes GBS of Rs.5352 crore & balance from BOT contribution

§ (a) Important Phase 'B' roads could be taken up in the 11th plan as per availability of additional funds.
(b) NHDP to be done as planned.

¹ Five times 07-08 allocation for SARDP-NE Phase A

² For green field airports at Pakyong (Sikkim) & Itanagar (Arunachal). Kohima (Nagaland) to be done later since Nagaland already has an airport at Dimapur.

* 50% each from GBS and AAI

@ 50 % each from NEC/NLCPR and AAI

^ Balance funds to be used for providing incentive for modal shift programme

³ Rail siding and warehouse at Changsari (Guwahati)

¹ GBS for railway projects in NE

⁴ Two third of the total equity participation to materialize during 11th plan and 10% of this as budgetary support. Balance as market loan etc. by the state Govt.

⁵ Two third of total transmission cost to be incurred during 11th plan and 10 % of this as GBS (balance to be borne by the concerned undertakings) including VGF.

Conclusion:

There is a shortfall of Rs.4462 crore in the provision of GBS under highway and prioritization is required so as to take up important stretches within available funds or the entire cost should be made available out of GBS.

Perhaps NEC/NLCPR/ACA etc could be pooled for executing Phase 'B' through creation of an Infrastructure Development Fund.

Additional Rs.240 crore under civil aviation needs to be provided for completing the proposed green field airports at Pakyong and Itanagar.

As the railway projects in NE are not commercially viable, all proposed project need be taken up out of GBS. In 2007-08, an allocation of Rs. 7611crore has been made and an earmarking of 20% for projects in NE would meet the GBS requirement during the 11th plan.