

# NORTH EASTERN REGION VISION 2020

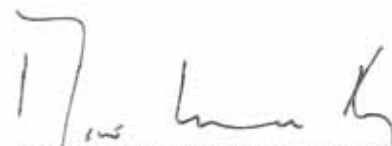


Ministry of Development of  
North Eastern Region



North Eastern Council



  
Chairman, North-Eastern Council  
and  
Minister for the Development of the North-Eastern Region

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H.E. Governor, Arunachal Pradesh

.....  
Chief Minister, Arunachal Pradesh

.....  
H.E. Governor, Assam

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Chief Minister, Assam

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H.E. Governor, Manipur

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Chief Minister, Manipur

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H.E. Governor, Meghalaya

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Chief Minister, Meghalaya

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H.E. Governor, Mizoram

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Chief Minister, Mizoram

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H.E. Governor, Nagaland

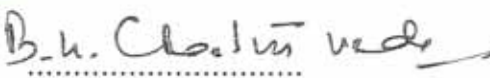
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Chief Minister, Nagaland

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H.E. Governor, Sikkim

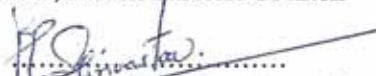
.....  
Chief Minister, Sikkim

.....  
H.E. Governor, Tripura

.....  
Chief Minister, Tripura

  
Member, North Eastern Council

  
Member, North Eastern Council

  
Member, North Eastern Council

Place: Agartala

Date: 13 May 2008




# NORTH EASTERN REGION VISION 2020

## THE VISION STATEMENT

1. At Independence, the North Eastern Region was among the most prosperous regions of India. Sixty years on, the Region as a whole, and the States that comprise it, are lagging far behind the rest of the country in most important parameters of growth.
2. The purpose of this Vision document is to return the North Eastern Region to the position of national economic eminence it held till a few decades ago; to so fashion the development process that growth springs from and spreads out to the grassroots; and to ensure that the Region plays the arrow-head role it must play in the vanguard of the country's Look East Policy.
3. It is recognized that the Partition of India and the denial, since the India-Pakistan war of 1965, of transit facilities to physically link all but 29 kilometres of the North East to the rest of India has severely limited the economic prospects of the North East. It is further recognized that an imaginative leap in foreign policy, defence policy and internal security policy, as much as in investment, infrastructure and commercial policy, is required to end the Region's geo-political isolation and put it on the path to accelerated and inclusive growth.
4. Inclusive growth calls for inclusive governance. The North Eastern Region has long-established traditions of community-based economic and social organization. This has facilitated a smooth transition to contemporary institutions of Panchayati Raj in all of Sikkim and Arunachal Pradesh; most of Assam and Tripura; and the valley areas of Manipur. The States of Meghalaya and Mizoram in their entirety and certain parts of Assam and Tripura fall under the Sixth Schedule of the Constitution and the institutions of local governance established thereunder for these areas, reinforced by village-level representative bodies. The hill areas of Manipur have local bodies mandated by State legislation. Nagaland has well established institutions of village level administration and development through village councils and village development boards respectively, set up as per Naga customary practices and usages, and also duly mandated by the State's Acts and Rules. The Nagaland experience of Communitization has been held up as the exemplar for the country as a whole by none less than former President Abdul Kalam. Thus the North Eastern Region is well-equipped with institutions of inclusive governance to assure inclusive growth. This Vision for accelerated and inclusive growth is predicated on the growth process involving and spreading through these various institutions of democratic, representative, participative and popular development.
5. The priority sector must be agriculture for with the Region's very high dependence on agriculture and allied activities, comprising over 80 per cent of the Region's gross domestic product, it is only through a Green Revolution that the back of the Region's poverty can





be broken and the people as a whole placed on the parabola of progress. Such a Green Revolution must comprise the following essential elements:

- The rapid replacement of traditional cropping patterns by short-duration, high-yielding varieties of paddy in the *kharif* season followed in the *rabi* season by wheat, maize, mustard or vegetables, along with soil nutrients like lime and the judicious use of pesticides, to dramatically augment agriculture productivity.
- The productivity of agro horticulture crops in the North Eastern Region is significantly lower than the prevailing national standards. It is imperative to promote improved methods of cultivation to raise productivity levels. A successful example is the adoption of System of Rice Intensification (SRI) in Tripura which has yielded a dramatic rise in productivity. This may be emulated by other areas of the region that lie in the plains.
- Widespread promotion of horticulture and floriculture, as well as of medicinal and aromatic plants and herbs, including organic farming, to capture highly remunerative niche markets abroad. Sikkim, particularly, would pursue its natural inherent competitive advantages in horticulture and floriculture.
- Plantations, especially for bamboo, rubber, spices and fruit, and the rejuvenation of the tea gardens, especially through small farmers and farmers' groups.
- Forestry and conservation to ensure the premier position of the North East in forest cover; bio-diversity and genetic wealth; and wild life
- The progressive phasing out of the practice of *jboom*, but only after guaranteeing alternative, remunerative local means of livelihood to the tribal communities concerned
- The determined promotion of all forms of animal husbandry, fisheries, dairying and bird life (the decline in all of which has substantially contributed to low nutritional standards in the North East). This would be accompanied by promotion of fodder cultivation and sustained availability of animal feed.

Enhancement of yields and output in agriculture and allied activities would need to be complemented by market development and monetization of the rural economy, calling for integrated attention to:

- Agricultural extension, including mobilizing the Panchayats and other institutions of local self-government for the purpose
- Land reforms
- Rural credit and banking
- Reform of agriculture cooperatives on the lines of the recommendations of the Vaidyanathan Committee on Short-term Rural Cooperative Credit Structure
- Agricultural link roads to reach farm output to markets
- Cold chain links and cold storages

- Export and fiscal incentives
- Non-Farm Rural Employment and Income Generation, especially handlooms, handicrafts and animal husbandry

As with investment in industry and infrastructure which is governed by the North East Industrial and Investment Promotion Policy, (NEIIPP) 2007, the rural sector requires a North East Agriculture and Allied Activities Development and Export Promotion Policy.

Irrigation and flood control, including drainage systems to prevent water logging, are also directly associated with the spread of the Green Revolution. With large dams becoming increasingly unfeasible for social, environmental and technical reasons, attention must focus on other means of irrigation. Water-harvesting, moisture conservation and prevention of soil erosion, especially in hill areas, is of crucial importance for the realization of their agricultural potential. Floods cause havoc, wiping out most gains of economic development virtually on an annual basis. Massive investment, accompanied by imaginative technical innovation, in irrigation and flood control, must be integral to the spread of the Green Revolution.

6. Inclusive growth calls for attention to inclusive governance and rural development. The single biggest constraint to accelerated growth is poor infrastructure affecting:
  - road connectivity
  - rail connectivity
  - air connectivity
  - cyber and telecom connectivity
  - inland waterways
  - power

The North Eastern Council (NEC) Sectoral Summits have identified in detail the steps that need to be taken in, and the financial resources required for, each of these key infrastructure sectors. The Union Government has assured the financial resources required. Wherever the public-private partnership (PPP) model is not found suitable in the North East, development of critical physical infrastructure should be funded through public resources in a time bound manner. The gaping lacuna is adequate absorptive capacity. While the North Eastern States will undertake determined efforts to augment domestic absorptive capacity, it would be essential to bring in the private sector from the rest of the country, as well as foreign direct investment, equipment, management and technical expertise, to exponentially increase the absorptive capacity to take in the financial resources available for building infrastructure. It would also be critical to inclusive growth to ensure that the first beneficiaries of infrastructure development, especially in regard to power and road connectivity, are the people of the North East in their far-flung villages and towns.

7. Even as the North East Industrial Policy (NEIP), 1997 saw a substantial spurt in investment in the hill states of North India (to which NEIP 1997 was extended), it is now expected that the comprehensive North East Industrial Investment and Promotion Policy, 2007 exclusively meant for the eight North East States, will lead to rapid and widespread industrial development in the North East Region, including not only large but also small and medium industry, as also in the services sector, including the hospitality industry and tourism; IT and ITES; and the health sector. Initial responses from Indian and foreign (especially NRI and Thai) investors have been encouraging. Village and micro-enterprises, and Rural Business Hubs set up by business enterprises in association with Panchayats and other representative local bodies, will help supplement farm employment and incomes and progressively draw excess populations off the land. A major thrust towards entrepreneurship development is being coordinated by the Indian Institute of Entrepreneurship, Guwahati. The North East Development Finance Corporation (NEDFi) and the Indian Chamber of Commerce, the designated chamber for the industrialization of the North East, are critical to the implementation of NEIIPP, 2007.
8. The potential for quarrying and mining, ranging from coal and limestone to uranium, is very considerable but requires the most careful adherence to environmental laws, standards and norms to promote not just accelerated growth but sustainable development. To enhance the share of manufacturing and bring about a desired change in the sectoral composition of the GDP of the region, enhanced investment through the public, private and joint sector must be promoted.
9. Human resources are the single most promising development asset of the North East. A talented people, with standards of literacy well above the national average, their potential is being stifled by inadequate access to quality education, vocational education, training in languages (including Hindi, English and foreign languages), training in computers and IT, technical training, and business and management skills. Investment in education and sports, arts and culture, and capacity-building in general, is a soft investment with enormous potential for high economic returns. A concerted effort to create centres of excellence (like IITs/ IIITs/ IIMs) through both public and private initiatives is essential to address the critical skill shortages, especially in higher and technical education for the region. Each State should have at least one such centre.
10. With 96 per cent of the borders of the North Eastern Region constituting international boundaries, and in explicit recognition of the need to break the fetters of the geo-political isolation of the Region, it is necessary to factor in what the Minister of External Affairs has described as “new inputs” in foreign, defence, internal security and international trade policy. To this end, the immediate priority is to build the required infrastructure right up to the border areas, establishing connectivity and communication links to the cross-border points through which trade and economic exchanges with the countries neighbouring the North Eastern Region are proposed to be promoted under the Look East Policy. This priority is to be accorded by all Central agencies concerned and State Governments because while the Look East Policy has yielded few returns to the Region thus far, it is in North



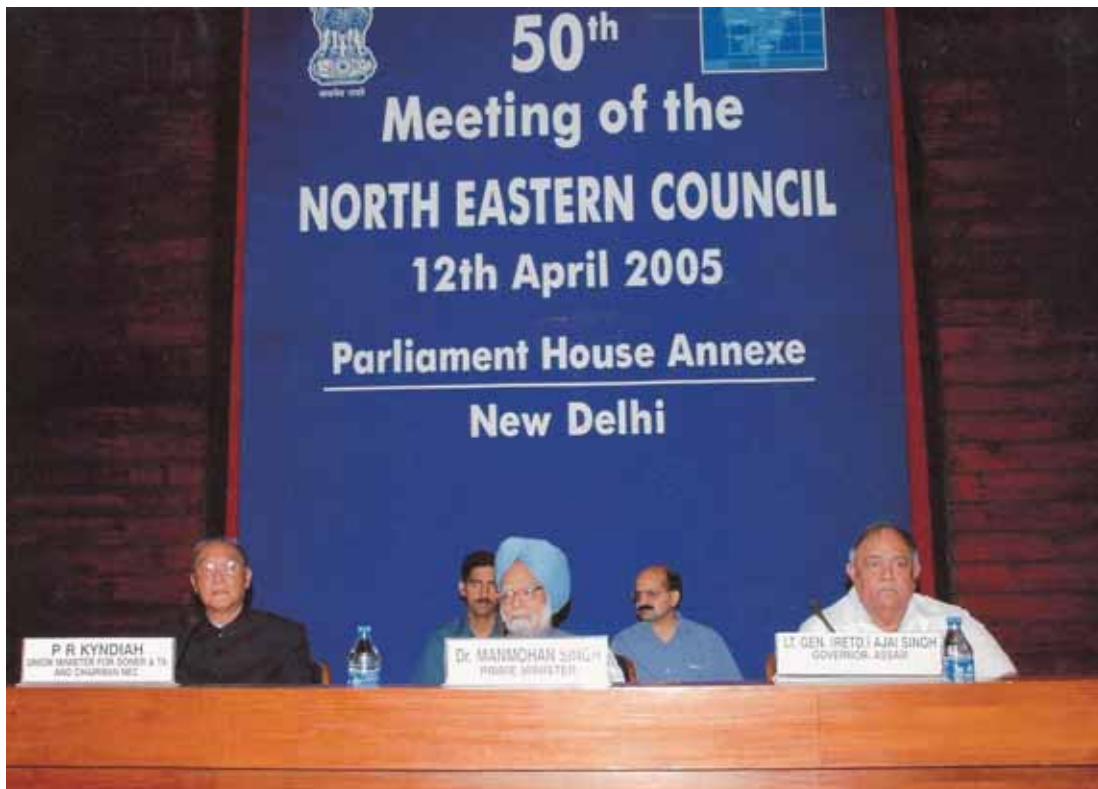
East India that South-East Asia begins and, as such, it is for the North East to be enabled to play the arrow-head role in the further evolution of this Policy. This requires a redefining of the Look East Policy to resolve outstanding issues of trade, transit and investment with the countries neighbouring the region. It also involves promoting Indian investment in infrastructure in partner countries, especially Myanmar, particularly in respect of ports such as Sittwe and international highways to connect the North Eastern Region to ASEAN. Such investment might also be encouraged where required for transit between the Region and the rest of India, as also for trade with the neighbourhood and beyond. However, in such a process, we recognize that it is critical to address the challenges of border management, especially with regard to cross border migration, terrorism, drugs and arms supply and other forms of non-conventional security threats for ensuring the rights and traditions of local ethnic groups comprehensively in the context of global forces of change.

11. To significantly narrow, let alone eliminate within the next decade or so, the growing gap between growth rates in the country as a whole and much of the North Eastern Region calls for a massive increase in the flow of financial resources to the Region, exponentially much larger than the current or presently envisaged flow. However, the investment required would more than pay for itself over a relatively short period of time as the Region is abundantly endowed with natural and human resources that would almost immediately, and certainly within a brief gestation period, start contributing to the overall growth of the national economy, instead of, as at present, dragging down the country's overall economic performance. With tightly set targets, clear outcomes, strategies, and coordinated planning for the Region as a whole, the North East can be revitalized to become increasingly self-sufficient and a net positive contributor to the national exchequer and the country's economy. Initiating the process is the imperative requirement.
12. There are three critical non-economic requirements that will condition economic performance on the ground:
  - Law and order, especially internal security
  - Good governance, including governance at the grassroots through institutions of local self-government
  - Diplomatic initiatives with the neighbourhood of the North East to secure what the Minister of External Affairs has described as the "new paradigm" where "foreign policy initiatives blend seamlessly with our national economic development requirements".
13. The intricate cultural and ethnic mosaic which the North-East region represents, with over 200 ethnic groups with their own languages and socio-cultural identity, coupled with factors such as geographical location and connectivity, poses a variety of challenges on the law and order and security fronts. The extensive international borders of various States in the region, while offering opportunities in the context of the 'Look East Policy', also add further complexity to the security situation. This is further compounded by the regional aspirations of the different groups in various States, a number of whom have taken up

arms and have been indulging in violence. Keeping all this in view, although law and order is constitutionally the responsibility of the State Governments, the Ministry of Home Affairs, in close coordination following an integrated and multi-faceted strategy, including supplementing the efforts and resources of the State Governments to strengthen their security related arrangements, dialogue with groups who have shown a willingness to unconditionally abjure violence and come into the mainstream, discussions at the diplomatic level in respect of security related matters, strengthening the arrangements for border management including infrastructural and human resource development in the border areas. Efforts are being made on a continuing basis to fine tune the various elements of the strategy as may be required, from time to time, keeping in view the special needs of different areas and people in region.

14. Good governance calls for probity, transparency and accountability. This is a matter of both ethics and governance systems. Effective devolution, reinforced by social audit, will considerably strengthen monitoring and vigilance at the grassroots level and, hopefully, gradually impact higher echelons of governance. Equally, the importance of capacity-building and institution-building cannot be over-emphasized. It is no longer the availability of financial resources but the capacity of institutions and individuals in the North East to make effective use of available resources that is proving the critical constraint to growth. To combat this, every effort needs to be made to induct good officers from all over the country, as well as from within the North Eastern Region, into all levels of governance. Institution-building calls for strengthening State departments and agencies, as well as promoting fruitful partnerships between civil society and State Governments. Strengthening of institutions of local self-government is particularly important. At the regional and national level, the North Eastern Council and the Ministry of Development of North Eastern Region need to be re-conceived and fully equipped, in terms of funds and personnel, to





meet the challenges of implementing North Eastern Region Vision 2020. Regional institutions under the aegis of the North Eastern Council such as NERIWALM and others like NEDFI and NERAMAC, require restructuring, revamping and rejuvenation.

15. Ministries, departments and agencies of the Union Government have to be sensitized to the need to give priority attention to the requirements of the North Eastern Region and its component States so that the substantial budgetary grants being made exclusively for the North Eastern Region are planned in close consultation with the States of the Region and spent in a time-bound manner efficiently and honestly and directed towards benefiting, first and foremost, the common man of the North East.
16. Diplomatic initiatives of the kind envisaged by the Minister of External Affairs, based on “new inputs” and “seamlessly” blending foreign policy with “national development requirements”, are urgently required for resolving outstanding issues and promoting good relations with countries neighbouring the North East. In this connection, it is essential that prior consultations be held with the State Governments concerned as well as the Ministry for the Development of the North Eastern Region (DoNER) and the North Eastern Council Secretariat. Institutional exchanges between the offices of the Ministry of External Affairs in the North East and the NEC Secretariat need strengthening. A Branch Secretariat of MEA needs to be established in Shillong as soon as possible.
17. The determination of the Union Government to close the gap between the rest of the country and the North Eastern Region, and to restore the Region to a position of national

economic eminence, is well evidenced by the decision to earmark 10 per cent of the gross budgetary support given to all eligible Ministries of the Union Government exclusively for the North East notwithstanding the fact that proportionately the share of the population of the North East (at about 4 per cent) and of the area of the North East (at about 8 per cent) is lower than the proportion of Central financial resources being spent in the North East and being maintained in the Non-Lapsable Central Pool of Resources (NLCPR) for the North Eastern Region. It is also evidenced in the statutory requirement for the NEC to act as a regional planning body. The Ministry of DoNER, as its very name implies, is to concern itself with all aspects of the development of the North Eastern Region. The North Eastern Region is an integral part of the Union of India and its people are proud members of the Indian family. The Union and State Governments of the Region stand shoulder to shoulder in pledging themselves through this Vision Statement to the rapid realization of the ambitious but realistic goals of North Eastern Region Vision 2020.



## ACKNOWLEDGEMENTS

The Vision 2020 document is the collective effort of numerous individuals and institutions, including professionals, intellectuals, officials, public personalities and the general public at both the regional and national levels. It reflects the collective wisdom of scholars and experts as well as the perceived requirements and needs of the people of North Eastern Region of India. The final document is thus the outcome of the collective thinking, wisdom and effort of all those involved with the development and welfare of people across the region, including the people themselves.

The preparation and process of finalization of the document aroused a great deal of interest both during the preparation and hearings of the draft document, which were held across the entire North-Eastern Region. The North Eastern Council (NEC) acknowledges the enthusiasm, response and contribution, both direct and indirect, made by the people of the North Eastern Region. Had it not been for their demonstrable concern to make the document reflect their aspirations and wishes, the document in its present form could not have taken shape. NEC is grateful to each and every one, both individually and collectively, for their contribution to the formulation of the Vision 2020 document.

This Vision Document owes almost all of its facts, figures and statistical tables, and the compendium of documents in the Annexe at Volume III, as well as the basic structure of the argument to Dr. M. Govinda Rao, Director of the National Institute of Public Finance and Policy, New Delhi and his dedicated team of Researchers and Research Associates listed below in alphabetic order:

- (i) Dr. Alokesh Barua, Professor, Jawaharlal Nehru University
- (ii) Dr. Anuradha Bhasin, Consultant, NIPFP
- (iii) Dr. Gautam Naresh, Senior Economist, NIPFP
- (iv) Dr. Manoj Pant, Professor, Jawaharlal Nehru University
- (v) Dr. Rita Pandey, Senior Fellow and Professor, NIPFP

The NIPFP team were assisted and guided by a Steering Committee chaired by Dr. B.G. Verghese and comprising the following experts listed below in alphabetic order:

- (i) Shri Alban Couto, IAS (Retd), Adviser, Government of Goa
- (ii) Shri C.J. Thomas, Director, Indian Council of Social Science Research ,  
NER Centre
- (iii) Shri H.V. Lalringa, IAS (Retd), ex-Secretary, NEC
- (iv) Shri L.C. Jain, ex-Member, Planning Commission
- (v) Prof. Mahendra P. Lama, Vice Chancellor, Sikkim University
- (vi) Prof. (Smt) Mahfuza Rahman, Cotton College, Guwahati.
- (vii) Dr. M. Govinda Rao, Director, NIPFP
- (viii) Prof. Mrinal Miri, ex-Vice Chancellor, North Eastern Hill University



- (ix) Prof. N. Mahendro Singh, Deptt Economics & Director, CDC, Manipur University (Retd)
- (x) Dr. Rita Pandey, ex-Sr. Fellow (Professor), NIPFP
- (xi) Shri R. Kevichusa, IAS (Retd)
- (xii) Dr. R.M. Abhayankar, IFS (Retd), ex-Secretary, Ministry of External Affairs and Director, Centre for West Asian Studies, Jamia Millia Islamia, Delhi
- (xiii) Smt. Sushma Singh, IAS, ex-Secretary, Ministry for the Development of the North-Eastern Region
- (xiv) Dr. V.A. Pai Panandikar, ex-Director, Centre for Policy Research, New Delhi

To the Director, NIPFP and his team, as well to the Chair and Members of the Steering Committee, the NEC places on record its deep debt of gratitude. NEC also acknowledges and thanks its Chairman and Minister for the Development of the North-Eastern Region, Shri Mani Shankar Aiyar, for the keen interest he took in the work of the Steering Committee. He has personally contributed, in collaboration with his senior consultant, Dr. Nupur Tiwari, to the chapters on Inclusive Governance and Poverty Eradication in Volume II.

The detailed work of NIPFP was preceded and oriented by an exercise in people's planning, unprecedented in the annals of the North-East and, indeed, perhaps anywhere in the country, involving securing responses to a detailed questionnaire from nearly 50,000 respondents resident in the North-East. This was reinforced by holding a series of 12 public hearings on the initial NIPFP draft in different locations in all states of the North-Eastern Region. The outcome of the public hearings is given *in extenso* in Volume III. We have truly fulfilled the Hon'ble Prime Minister's mandate to make Vision-2020 a "People's Plan":

"I am also pleased that the Vision Document will be drafted with the involvement of different sections of the people. It should be perceived as a People's Plan. This approach would also be in tune with the strong traditions of self-governance in the North Eastern Region. Intelligent involvement of youth, especially university students and faculty for various items of the planning exercise, would give them a glimpse of the future being planned for them". (Extract taken from his inaugural address to the first meeting of the restructured NEC held on 12 April 2005).

The NEC places on record its deep debt of gratitude to its two full-time Members, Dr. I.K. Barthakur and Shri P.P. Srivastav, who coordinated the people's participation exercise under the overall aegis of the Centre for North East Studies headed by Shri Sanjoy Hazarika. It also places on record its deep gratitude to those who coordinated the public hearings in October-November 2007:

- (i) Ms. Anuradha Bhasin, Consultant, NIPFP – Silchar, Assam
- (ii) Shri B.G. Verghese, Scholar and Author – Guwahati, Assam
- (iii) Shri C.J. Thomas – Director, ICSSR (NER), Dibrugarh, Assam
- (iv) Shri Falguni Rajkumar, Secretary, NEC – Shillong, Meghalaya
- (v) Dr. Gautam Naresh, Sr. NIPFP – Bomdila, Arunachal Pradesh

- (vi) Shri H.V. Lalringa, IAS (Retd)/ Dr. Alokesh Barua, Professor, JNU – Aizawl, Mizoram
- (vii) Dr. I.K. Barthakur, Member, NEC – Itanagar, Arunachal Pradesh
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- (ix) Prof. Mahfuza Rahman, Professor, Cotton College – Pasighat, Arunachal Pradesh
- (ix) Dr. Manoj Pant, Professor, JNU – Imphal, Manipur
- (xi) Shri P.P. Srivastav, Member, NEC – Kohima, Nagaland
- (xii) Smt. Sushma Singh, ex-Secretary, DoNER and Prof. Mahendra Lama, Vice Chancellor, Sikkim University – Gangtok, Sikkim

At the conclusion of the public hearings it was decided to entrust further work on the document to a team of experts from the Region, led by Shri Sanjoy Hazarika, and comprising:

- (i) Dr. Jayanta Madhab, Adviser to Hon'ble Chief Minister, Assam
- (ii) Dr. Lalneihzovi, Professor, Mizoram University
- (iii) Prof. Mahendra P. Lama, Vice Chancellor, Sikkim University
- (iv) Ms. Patricia Mukhim, Eminent Columnist & Editor, The Shillong Times
- (v) Shri Udayan Misra, Professor (Retd), Dibrugarh University

NEC is particularly grateful to this team of experts for the valuable regional perspective they brought to the finalization of the document. They were given only a few weeks to accomplish their task, which they did with great dedication.

NEC also wishes to bring on record its deep debt of gratitude to a number of institutions and officials involved in polishing the document at the final stages of preparation:

#### **Institutions**

- a. National Institute of Rural Development, Guwahati
- b. Indian Institute of Entrepreneurship, Guwahati
- c. North-Eastern Development Finance Corporation Ltd. (NEDFi), Guwahati
- d. Institute of Banking Management, Guwahati
- e. North-East Research Institute for Water and Land Management (NERIWALAM), Tezpur
- f. Cane and Bamboo Technology Centre, Guwahati
- g. Indian Chamber of Commerce, Kolkata
- h. Confederation of Indian Industry, Guwahati
- i. Khadi and Village Industries Corporation, Mumbai
- j. Fountainhead Solutions Pvt. Ltd., Gurgaon.

#### **Officials**

- 1. Dr Hari Krishna Paliwal, ex-Joint Secretary, M/o DoNER



2. Shri Rajendra Mishra, Joint Secretary, M/o DoNER
3. Smt Jayashree Mukherjee, Joint Secretary, M/o DoNER
4. Shri P.K. Pattanaik, Joint Secretary, M/o DoNER
5. Shri Sajal Mittra, ex-Director, M/o DoNER
6. Shri Pankaj Asthana, Director, M/o DoNER
7. Shri Nikhil Pandey, Director, M/o DoNER
8. Dr. Nupur Tiwari, Senior Consultant to the Minister of DoNER and Panchayati Raj

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Smt. Veena Sriram Rao, Secretary, DoNER, personally undertook the monumental task of editing the final version of the document. To her, NEC owes a very special debt of gratitude.

The NEC also places on record its appreciation of the very detailed inputs that were received from the various Ministries and Departments of the Central Government, their agencies and other Central Organisations (Commodity Boards under the Ministry of Commerce, NIRD-NEEC, Guwahati, IIBM, Guwahati) during the eight NEC Sectoral Summits held during 2007 which have been paraphrased liberally and incorporated in the Vision Document at the appropriate places. State participants in the Sectoral Summits have also made significant contributions reflected in numerous parts of the document.

The draft NER Vision – 2020 was considered by the 55<sup>th</sup> NEC Plenary in New Delhi in December, 2007 at which the important decision was taken that each State Government would provide a State-specific Vision Statement for inclusion in NER Vision-2020. These State-specific Vision documents are being compiled in Volume IV of this Report.

The NEC Secretariat thanks Their Excellencies the Governors and Hon'ble Chief Ministers of the eight states of the North-East Region, as well as the successive Ministers of DoNER, Shri P.R. Kyndiah and Shri Mani Shankar Aiyar, as well as Secretaries, DoNER and NEC and their officers and staff for all the guidance and assistance rendered in preparing and finalizing this document. Above all, it is the Honourable Prime Minister, Dr. Manmohan Singh, who set the course and steered the ship to its destination. To all of them the grateful thanks of the Region and the Nation.

The Vision NER 2020 document, including the Vision-2020 Statement, was adopted at the NEC's 56<sup>th</sup> Plenary Session held at Agartala on the 13<sup>th</sup> of May 2008, which now stands released to the public domain.

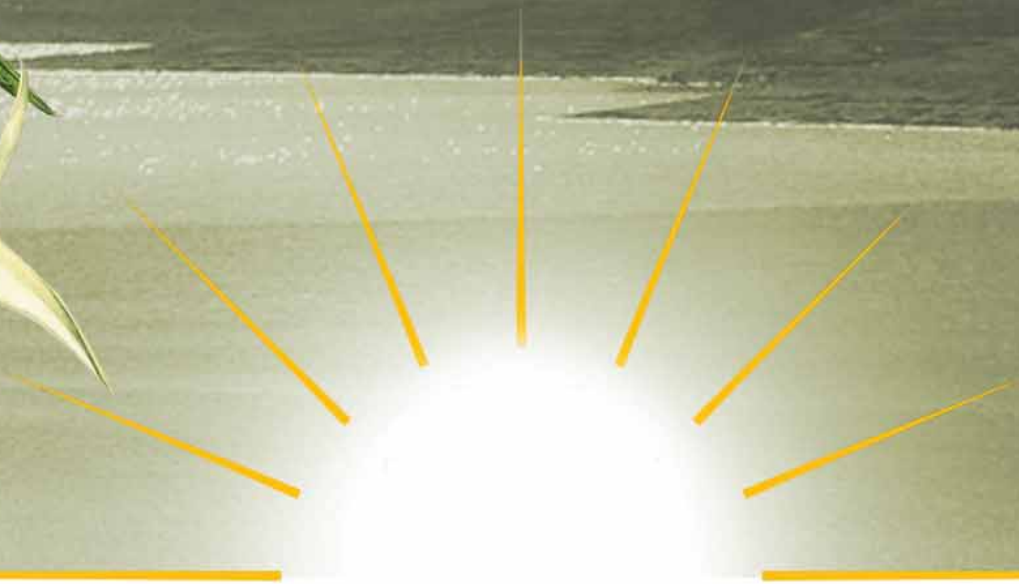


( Falguni Rajkumar )  
Secretary, North Eastern Council

Peace, Progress and Prosperity in  
the North Eastern Region  
VISION 2020

# GENERAL STRATEGIES FOR THE REGION

**Volume -I**







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# General Strategies for the Region

## I. A Summary and a Starting Point

### (a). Introduction

India's North Eastern Region is a '*rainbow country ...extraordinarily diverse and colourful, mysterious when seen through parted clouds*'. It stretches from the foothills of the Himalayas in the eastern range and is surrounded by Bangladesh, Bhutan, China, Nepal and Myanmar (Map 1). It includes the seven sisters - Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura, along with a small and beautiful cousin in the Himalayan fringes, namely, Sikkim. The region is rich in natural resources, covered with dense forests, has the highest rainfall in the country, with large and small river systems nesting the land and is a treasure house of flora and fauna. Marked by diversity in customs, cultures, traditions and languages, it is home to multifarious social, ethnic and linguistic groups.

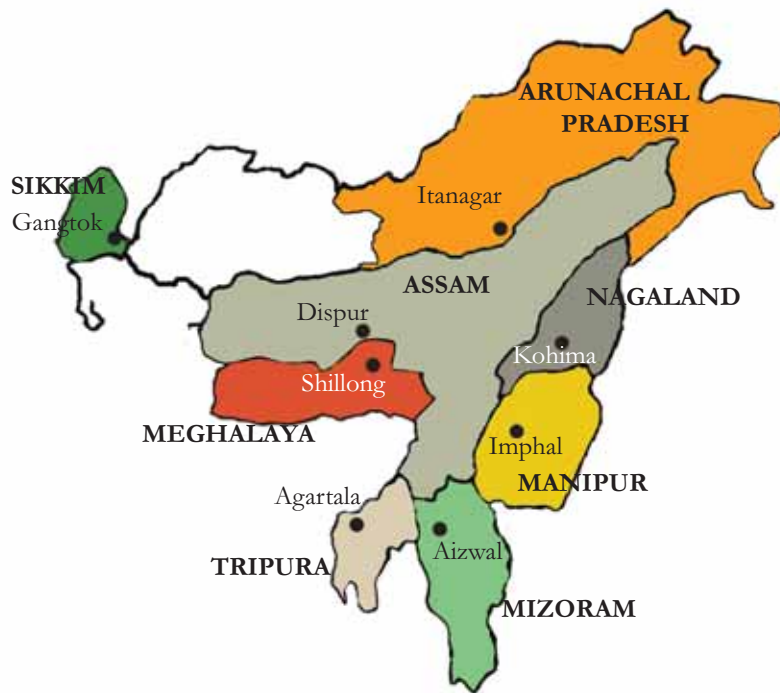
Troubled by history and geo-politics, the North East has remained one of the most backward regions of the country. The trauma of partition in 1947 not only took the region backwards by at least a quarter of a century, but also placed hurdles on future economic progress. It isolated the region, sealed both land and sea routes for commerce and trade, and severed access to traditional markets and the gateway to the East and South-East Asia – the Chittagong port in East Bengal (now Bangladesh). It distanced the approach to the rest of India by confining connectivity to a narrow 27-km-wide Siliguri corridor, making it a 'remote land' and constraining access for movement of goods and people. The uneasy relationship with most of the neighbouring countries has not helped the cause of development of the region either: with 96 per cent of the boundary of the region forming international borders, private investment has shied away from the region.

Poor infrastructure and governance is combined with low productivity and market access. Inability of governments to control floods and river bank erosion causes unmitigated damage to properties and lives of millions of people every year in the region. If the quest for ethnic and cultural identities has sowed the seeds, frustration and dissatisfaction from seclusion, backwardness, remoteness and problems of governance have provided fertile ground for breeding armed insurgencies. There is overwhelming dependence for resources on the Central Government, public investment in the region has sub-optimal productivity due to weak of forward and backward linkages.

### b. Vision 2020: Ushering in Peace and Prosperity for the People

People of the region have an ambitious vision: by 2020, they aspire to see their region emerge peaceful, strong, confident, and ready to engage with the global economy. They would like to march on the path of economic, social and cultural progress towards prosperity and well-being, to participate in governance and determine the allocation of public resources and public services they receive. Political empowerment in evolving responsive governance would help to achieve social and economic empowerment as well. They want to banish poverty and illiteracy and ensure that every family in the region has the opportunity to live a healthy and secure life with dignity and

Map 1: Map of North Eastern Region



self-respect. Moving away from the dependency syndrome, people in the region would like to acquire the capability and self-confidence to shape their own destinies. They would like to enjoy their freedoms – freedom from hunger and poverty, the freedom to exercise choice in their avocations, income-earning and spending decisions, and political, economic and social freedoms without fear. They would like to enjoy peace and achieve sustainable progress and prosperity.

### c. Challenges and Strategy

The challenges to ensuring peace and progress in the region are formidable. The gap between the region and the rest of the country in terms of various developmental outcomes, productivities and capacities of people and institutions is large and growing, and has to be bridged. Even within the region, there are vast differences, particularly between populations living in the hills and in the plains and between those living in the towns and villages. Given the vast disparities within the region, a development strategy will have to be evolved depending upon prevailing resources, conditions and people's needs and priorities. Further, the development strategy for the various tribes in the region will have to be participatory and should be calibrated in their own setting. Given the complexity of the task, augmenting investment to accelerate growth in the region is only a part of the story. The successful transformation of investments into developmental outcomes requires a variety of strategic initiatives.

We have put forward a strategy for encompassing (inclusive) development of the region, to meet the challenge of realising the vision, which comprises six interdependent components:

- (i) Empowerment of the people by maximizing self-governance and participatory development

through grass-roots planning. Such planning will help to evolve development strategy based on the resources, needs and aspirations of the people.

- (ii) Rural development with a focus on improving agricultural productivity and the creation of non-farm avocations and employment.
- (iii) Development of sectors with comparative advantage agro-processing industries, modernization and development of sericulture, investment in manufacturing units based on the resources available in the region, harnessing the large hydroelectric power generation potential and focus on developing services such as tourism that will help to accelerate development and create productive employment opportunities.
- (iv) Maximising self-governance, introduction of participatory planning, rural development and development of sectors with comparative advantage call for significant augmentation of capacity of the people and institutions both in the government and private sectors. Capacity development will have to address the issue of imparting skills among the people to enhance their productivity, generating a class of entrepreneurs within the region willing to take risks. They will also have to be provided with the necessary support through the creation and development of institutions at all levels to undertake planning.
- (v) Augmenting infrastructure, including rail, road, inland water and air transportation to facilitate a two-way movement of people and goods within the region and outside, communication networks including broadband and wireless connectivity, and harnessing of the vast power generation potential, all of which will open up markets for produce from the region, attract private investment, create greater employment opportunities and expand choices for people of the region. Making the Look East Policy meaningful for the region by connecting it with Southeast Asian markets. Connectivity of NER with ASEAN would require opening up the sea route through the Chittagong port and the land routes through Myanmar and China. In addition, opening up the land route through Bangladesh could enormously benefit both countries and diplomatic efforts should focus on improving relations with the neighbours.
- (vi) Ensuring adequate flow of resources for public investments in infrastructure, implementing a framework for private participation in augmenting infrastructure and creating an enabling environment for the flow of investments to harness the physical resources of the region for the welfare of the people.

The road from the current anarchic situation to progress and prosperity is long and arduous, but it has to be trekked. This is a necessity, an imperative, for peace and prosperity in the region not only determines the future of 39 million people of the region but also the unity and integrity of the country. In what follows we trace the terrain to understand the enormity of the task. The next section presents the starting point of the analysis, which is the current state of development and the problems faced in the region. Section III presents a detailed projection of the vision of development in quantitative and qualitative terms and the magnitude of the challenges to achieving the goals. The strategy for meeting these challenges is presented in Section IV, and the final section (V) presents a perspective of the vision of development for the region.



## II. North Eastern Region: Economic, Social and Demographic Profile

The eight States located in India's north-east cover an area of 2,62,179 sq. km. constituting 7.9 per cent of the country's total geographical area, but have only 39 million people or about 3.8 per cent of the total population of the country (2001 census). Over 68 per cent of the population of the region lives in the State of Assam alone. The density of population varies from 13 per sq. km. in Arunachal Pradesh to 340 per sq. km. in Assam. The predominantly hilly terrain in all the States except Assam is host to an overwhelming proportion of tribal population ranging from 19.3 per cent in Assam to 94.5 per cent in Mizoram. The region has over 160 scheduled tribes and over 400 other tribal and sub-tribal communities and groups. It is predominantly rural with over 84 per cent of the population living in the countryside. According to the 2001 Census, the total literacy rate of the population in the region at 68.5 per cent, with a female literacy rate at 61.5 per cent, is higher than the country's average of 64.8 per cent and 53.7 per cent, respectively. Of course, there are significant variations in the literacy rates among different States with Assam, Arunachal Pradesh and Meghalaya below the national average. Even as the average literacy rate in the region is higher than the national average, there are concerns about the quality of education. More importantly, the literacy rate has not translated into higher employability or productivity.

Richly endowed with natural resources, the region is identified as one of the world's biodiversity hotspots; it hosts species-rich tropical rain forests and supports diverse flora and fauna and several crop species. The forest cover in the region constitutes 52 per cent of its total geographical area. Thus, a large part of the area of the region is used to providing global public goods, which limits the availability of arable land and enhances the cost of delivering public services to the sparse population. Similarly, reserves of petroleum and natural gas in the region constitute a fifth of the country's total potential. The region is covered by the mighty Brahmaputra-Barak river systems and their tributaries, but water has been a source of misery rather than a resource. Erosion of river banks caused by floods has been an annual feature involving enormous loss of life, property and livelihood. Geographically, apart from the Brahmaputra, Barak and Imphal valleys and some flat lands in between the hills of Meghalaya and Tripura, the remaining two-thirds of the area is hilly terrain.

Driven by expanding global trade and investment, the region was in the forefront of development almost 150 years ago. The vast river systems and small rivulets were a means of livelihood for a majority of the population in the valleys and plains. Global trade was conducted through the sea-route, a network of inland waterways, and land transportation through road and railways. In fact, the railway network between Dibrugarh and Chittagong was one of the earliest projects in India implemented by the British in the late-nineteenth century. The natural transportation route through East Bengal not only reduced the physical distance but also provided emotional closeness. The rapid spread of tea gardens followed the establishment of the first tea garden in 1835 and the export of the first consignment of tea to London in 1838. The discovery of oil in Makum and establishment of a refinery in Digboi in 1890 laid the foundation for the development of an undivided Assam. The zeal of missionaries was largely responsible for spreading literacy.

At the stroke of midnight on August 15, 1947, India gained independence. The partition of the country leading to the creation of East Pakistan changed the economic landscape of the region, virtually disconnecting it from the rest of the country, with the only remaining link being the narrow 27 km Siliguri corridor. Today, almost the entire boundary of the region (98 per cent) is an international border shared with China and Bhutan in the north, Myanmar in the east, Bangladesh in the south and west, and Nepal to the west of Sikkim. The carving out of East Pakistan from Bengal blocked the natural sea route through the port city of Chittagong. Thus, the partition of the country land-locked the region, blocked natural transportation routes and severed its market access. The geo-political distancing of the region from its main port of Kolkata combined with economic insulation has caused immense structural damage to the NER economy.

The quest for ethnic and regional identity, nationalism, and ideological motivations have fomented a climate of insurgency in several parts of the North Eastern Region, which has led to political fragmentation of the region; the climate has been further fuelled by with the slow pace of development. The difficult terrain, dense forest cover and open borders with Myanmar and Bangladesh have provided a congenial environment for this.

The standard of living of the people in the region, as measured by per capita Gross State Domestic Product (GSDP), has lagged significantly behind the rest of the country. At Rs. 18,027 in 2004-05, it was less than the all-State average of Rs. 25,968 by 31 per cent. Interestingly, available information shows that at the time of independence per capita income in the undivided State of Assam was higher than the national average by 4 per cent. Thus, even under the British colonial rule the economic performance of the region was better than the rest of the country and this shows its vast developmental potential. However, as the growth rate of per capita GSDP lagged behind the rest of the country the gap narrowed, and by the late 1960s per capita income in the region had fallen behind. With the introduction of market-based economic reforms, differences in the growth rates in per capita GSDP between the region and the country increased further. During the period 1990-91 to 2004-05, on an average, while the aggregate GSDP of all States in constant prices increased at the rate of 6 per cent per year, the corresponding growth in the region was 4.4 per cent. Similarly, the region's growth rate of per capita income (2.5 per cent) lagged behind the average growth rate of the country (4 per cent) during the period by 1.5 percentage points. Not surprisingly, the difference in per capita incomes between the country and the region has steadily diverged. In 1990-91, the region's per capita income at current prices was lower than the national average by 20 per cent, a gap that widened to 31 per cent by 2004-05.

The aggregate picture presented above, however, hides vast differences between the urban and rural areas, the hills and the plains and among the other States. In the region, except for Mizoram, Nagaland and Sikkim which recorded marginally higher growth rates than the country average, per capita income levels in all other States were lower by varying magnitudes. Assam, the largest among the North Eastern States had the lowest per capita income at Rs. 15,661 which was lower than the country average by 40 per cent. Furthermore, even in the three States with per capita income levels higher than the national average, much of the income generated was in public administration. In fact, the share of income generated by public administration at 10.6 per cent was significantly higher in the region than in the country (6.3 per cent). It was as high as 17 per cent in



Arunachal Pradesh, Manipur and Sikkim. This underlines the overwhelming dependence of the population on the government for generating income, and a lack of productive economic activities in the primary, secondary and tertiary sectors of the economy.

The region lags behind the rest of the country not only in terms of per capita GSDP but in several other development indicators as well. People do not have access to basic services in adequate measure. The standard development indicators such as road length, access to healthcare, and power consumption in the region are below the national average (Table 1). The region generates

**Table 1 : NER states : Various Indicators**

State	Area (sq. km) 2001	Population (lakh persons)	Literacy rate (%) 2001	Infant mortality rate (per '000) 2005-06	Poverty ratio based on MRP-consumption 2004-05	Per capita GSDP (Rs) 2004-05	Forest coverage (%) 2003	Per capita electricity consumption (kwh) 2004-05	Road length (km/1000 sq. km. area) 2002
	1	2	3	4	5	6	7	8	9
Arunachal Pradesh	83,743	10.98	54.3	61	13.4	21,919	61.55	144.8	219.3
Assam	78,438	266.55	64.3	66	15.0	15,661	34.45	85.3	1140.9
Manipur	22,327	22.94	70.5	30	13.2	16,299	78.01	70.05	512.1
Meghalaya	22,429	23.19	62.6	45	14.1	20,775	42.34	352.2	426.5
Mizoram	22,081	8.98	88.8	34	9.5	30,357 <sup>+</sup>	75.71	133.7	229.8
Nagaland	16,579	19.90	66.6	38	16.5	26,129 <sup>+</sup>	52.05	87.2	1267.9
Sikkim	7,098	5.41	68.8	34	15.2	26,215	82.29	397.7	284.4
Tripura	10,486	31.99	73.2	52	14.4	24,984 <sup>++</sup>	60.01	113.1	1554.1
NER States	262179	389.84	68.5	45 <sup>#</sup>	13.9 <sup>#</sup>	18,032	54.52	110.4	660.9
India	3287240	10,287.37	64.8	57	23.6	25,944 <sup>*</sup>	23.57	411.1	755.4

Sources:

1. *Statistical Abstract of India (2006)*, used for Col. 1, 2, 7, 8, 9, downloaded from [www.mospi.nic.in](http://www.mospi.nic.in)

2. *NEDFi Data Quarterly (2005)*, Vol. 4, No. II, April, used for Col. 3.

3. Chapter 8 on Human Development (Table 8.20) of this report used for Col. 4.

4. [www.mospi.nic.in](http://www.mospi.nic.in) used for Col. 6.

5. <http://www.planningcommission.nic.in> used for Col. 5.

Note: # Simple averages used for NER; + Refers to estimated per capita GSDP for 2003-04 and 2004-05; ++ refers to its estimated value for 2004-05; \* Per capita GDP at factor cost (RE) from RBI, *Handbook of Statistics on the Indian Economy, 2005-06*.

less than 8 per cent of its 63,257 MW of hydroelectric power generation potential and its per capita power consumption at 110 Kwh. is almost a fourth of the national average (411 Kwh.). In Assam, Manipur and Nagaland, the per capita power consumption is as low as 85 Kwh., 70 Kwh. and 87 Kwh., respectively. The literacy rate in the region is high, but the slow pace of industrialisation and

limited capacity of the population to engage in productive economic activities means a high rate of unemployment and underemployment. The incidence of poverty in the region is high and the official income-poverty measure does not accurately reflect the deprivation. The usual calorific headcount measure of poverty estimated on the basis of National Sample Survey (NSS) consumption surveys in Assam does not reflect the deprivation in the hilly regions of the North East. Besides unrepresentative sampling, admittedly the calorie requirement in hill areas is higher and they are also handicapped by higher cost of living than the plains.

The problems of the region are not merely confined to lagging income levels, but extend to the process of development itself. A top-down development planning strategy has not involved people in designing and implementing the strategy and, not surprisingly, the relationship between public spending and service delivery outcomes has been tenuous. The various public investment projects in the region have not yielded commensurate benefits. Lack of people's involvement has robbed the system of a sense of belonging and led to inefficient and wasteful resource allocation on the one hand and a lack of social accountability on the other.

The partition of the region not only took the economy backwards by over a quarter of a century but also caused structural retrogression to a patronage-dependent economy from the Centre and Government-spending propelled economic growth. The trauma of partition in the NER was to imprison the economic fortunes of the region by international frontiers. At the same time, the top-down planning process did not create any scope for developing forward and backward linkages within the economy. The weak administrative capacity of the state has resulted in very high rates of return for armed insurgency and extortion and even more the perception of insurgency which has been a major deterrent to private sector initiatives in economic activities. Weak and unresponsive institutions of governance and market further added to the problem.

### **III. Progress to Peace and Prosperity**

#### **(a). Catching-up with the Rest of the Country**

Improving the standard of living of the people would require sustained increases in per capita income levels and its fair distribution amongst all sections. By 2020, people of the North East should have living standards comparable to people in the rest of the country. Given that income levels in the region are lower than the national average by over 30 per cent and that the region has lagged behind, catching up with the average income level in the country by 2020 would require significant acceleration in the growth rate in the NER. The task has been made even more formidable with the Indian economy reaching a higher growth path and the GDP estimated to grow at almost 8 per cent per year during the Tenth Plan.

The continued growth of the Indian economy at 9 per cent per year from 2006-07 to 2020 would, on an average, increase per capita income by about 7.61 per cent (Table 2). As over the period, population growth is expected to decelerate, per capita income growth is expected to accelerate from 7.51 per cent in the Eleventh Plan period (2007-12) to 7.80 per cent during the Thirteenth Plan (2017-22). Thus, by 2020, per capita income in the Indian economy is expected to be about Rs. 87,459 at the 2006-07 prices or about USD 2,250 at the prevailing exchange rate. To reach this level of income, between 2006-07 and 2019-20, GSDP in the North Eastern Region will





have to grow at 12.95 per cent per year on an average, or at 11.64 per cent in per capita terms (Table 3 and Exhibit 1).

**Table 2: Plan-wise Projected Per Capita GDP at 2006-07 Prices**

Plan	GDP (FC) at 2006-07 Prices		Average GR of Population (%)	Per Capita GDP at 2006-07 Prices	
	Level (Rs. crore)	Average annual growth rate (%)		Level (Rs.) annual	Average growth rate (%)
2006-07 (Base year)	3,743,472		111.22	33,659	
XI FY Plan (2007-08 to 2011-12)	24,419,920	9.00	1.39	42,079	7.51
XII FY Plan (2012-13 to 2016-17)	37,573,074	9.00	1.24	60,665	7.67
XIII FY Plan (2017-18 to 2019-20)	31,665,640	9.00	1.11	81,322	7.80
Growth rate per annum (%)		9.00	1.26		7.61
Estimated per capita GDP at 2006-07 prices in 2019-20			87,459		

Note: Growth rate of real GDP at 1993-94 prices for the period 2000-01 to 2004-05 was 5.86 per cent per annum.

**Table 3: Projected Per Capita GSDP at 2006-07 Prices of NE States: 2007-08 to 2019-20**

Year	Average Required Growth Rate of GSDP at 2006-07 prices (%)	Average growth rate of population (%)	Per Capita GSDP at 2006-07 Prices	
			Level (Rs.)	Average Growth Rate (%)
2006-07 (Base year)	92,233	4.17	22,139	
XI FY Plan	10.00	1.25	32,718	8.64
XII FY Plan	13.67	1.17	57,724	12.35
XIII FY Plan	16.37	1.05	87,462	15.16
Required GR (% pa)	12.95	1.18		11.64
Actual growth rate per annum (%)	5.34			
Target level			87,459	
Projected level			87,462	
Gap between target and achieved			-3	

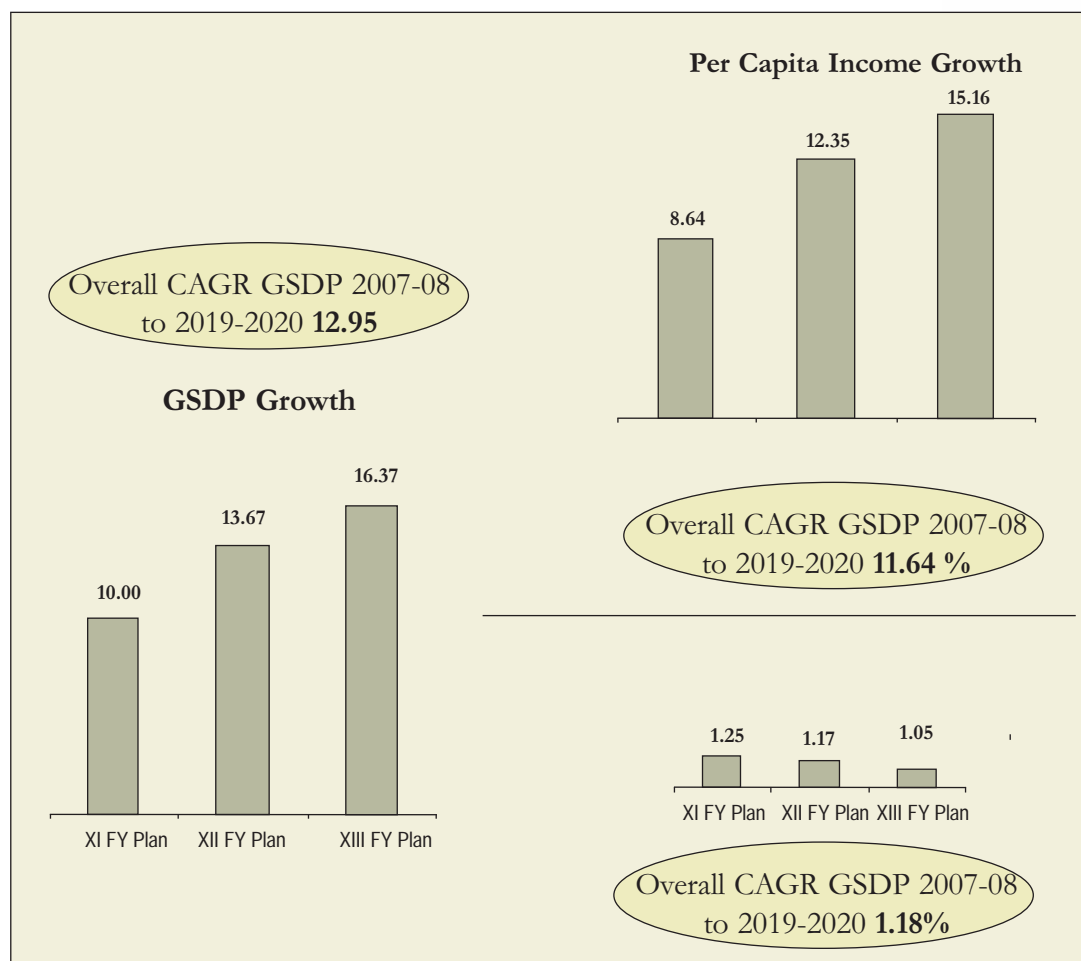
Source: NIPFP computation.

Data Sources:

1. Population estimates: Registrar General of India, Census 2001.
2. Quick estimates of GDP at factor cost: Government of India, Press Note on Revised Estimates of GDP, dated 31 May 2007
3. GSDP: mospi.nic.in



Exhibit 1 : Assumed Real Growth Rates of the NER Economy to Achieve the Economic Target by 2020



The process should be put in place expeditiously to accelerate the growth process in the region. However, it would be unrealistic to expect that the growth rate of per capita income will accelerate from 4.6 per cent recorded during 2000-05 to 11.64 per cent immediately. It is, therefore, necessary to split the time-frame into three Plan periods and set targets to steadily accelerate the growth rate in a phased manner to achieve the desired targeted per capita income growth rate of 11.64 per cent during the period. An illustrative scheme of acceleration is shown in Table 3, according to which, the growth rate of per capita GSDP should accelerate from the average of 4.6 per cent during 2000-05 to 8.64 per cent during the Eleventh Plan (2007-12), 12.35 per cent during the Twelfth Plan (2012-17) and 15.16 per cent during the Thirteenth Plan (2017-22). The changes required in the governance system, development strategy, reforms in policies and institutions, capacity-building in people and institutions and creation of a market friendly environment to achieve this acceleration will be discussed later in the document.

Accelerating growth in the NER to catch up with the rest of the country requires a massive increase in investments as well as a significant improvement in productivity. The crude estimate of additional investment needed by assuming an incremental capital-output ratio (ICOR) of 4, works

out to Rs 1,329,891 crore (Table 1.7A in Annexure 1.1 in Volume III) at 2006-07 prices or 48.1 per cent of the GSDP during the period. Thus, estimated investment is placed at Rs 211,613 crore (or 35.3 per cent of GSDP) during the Eleventh Plan; Rs. 505,499 crore (47.7 per cent of GSDP) during Twelfth Plan and Rs 612,779 crore (55.6 per cent of GSDP) during the first three years of the Thirteenth Plan period. An alternative estimate of investment by assuming declining ICORs from 4 during the Eleventh Plan to 3.6 during the Twelfth Plan and 3.2 during the Thirteenth Plan periods places the total investment requirement at Rs 1,156,785 crore or 41.9 per cent of GSDP in the region for the period. While the two estimates made under alternative assumptions look very large in absolute terms, as a proportion of GDP of the country they are only 1.4 per cent and 1.2 per cent, respectively. If the national investment rate relative to GDP during the period is assumed at 36 per cent, investment of 1.4 per cent in the region works out to a national investment share of about 3.8 per cent which is broadly equivalent to the population share of the region.

Indeed, increasing the investment share in the region to equal its population share requires considerable stepping up of public investment in the physical and the social infrastructure and creating an accommodating climate for private sector investment. This calls for significant initiatives in policies and institutions. There needs to be a paradigm shift in development strategy to increase the productivity of public investment by strengthening forward and backward linkages. This would call for empowerment of the people to have maximum self-governance and grassroots planning, building capacity in people and institutions to take the development agenda forward and a quantum leap in the quality of infrastructure and connectivity. Provision of world-class infrastructure and connectivity would require a significant increase in public investment. In the initial years, it is necessary also to expand the social infrastructure, particularly education including vocational education and skill development. Given the low level of entrepreneurial activity in the region, in the initial years, the government also has to take a proactive role and make investments in promotional areas as well.

Thus, both Central and State Governments in the region will have to make large investments to overcome the infrastructural deficit, particularly in the initial years, though in course of time, it should be possible to involve the private sector in this task through Public-Private Partnerships (PPPs). In order to enable this, it is necessary to create a proper framework for PPPs in infrastructure investments. Budgetary support for public investment too needs to be augmented to provide the required volume of viability gap funding.

## **(b). Structural Transformation**

Acceleration in the growth process in the region requires changes in the structure of the economies of the various States in the region. The growth rates in different States required to catch up with the per capita GDP of the country is summarised in Table 4. The increase in the growth rates required varies across States. Assam, the largest State in the region contributes close to 60 per cent of the regional GSDP. It also lags behind the country's average per capita income by about 17 per cent. Therefore, to catch up with the country's average per capita income, the State should accelerate its GSDP growth to an annual rate of 14.75 per cent, with a per capita GSDP growth of 13.39 per cent during the period 2006-20. Similarly, Manipur has to accelerate its growth of GSDP

to 12.87 per cent. Every State in the region except Nagaland has to grow faster than the national average, whereas Sikkim and Tripura can afford to match their pace with the national economy.

Growth acceleration in most of the North Eastern States requires structural changes in these economies. In most of the economies, income from public administration constitutes a major source and the Government Sector dominates the economy. Acceleration in economic growth will have to come from agriculture, manufacturing and non-government service sectors. This calls for significant changes in the development strategy followed so far, and the creation of an enabling environment for private investment in productive sectors.

**Table 4: NER States: Average Annual Growth Rates Required to Reach India's Per Capita GDP Level in 2019-20** Percent

State	Growth Rate of GSDP				Growth Rate of Per Capita GSDP			
	2007-12	2012-17	2017-20	2007-20	2007-12	2012-17	2017-20	2007-20
Arunachal Pradesh	8.751	1.90	14.25	11.18	7.47	10.64	13.10	9.93
Assam	10.00	16.00	20.25	14.75	8.61	14.63	18.98	13.39
Manipur	10.75	13.25	15.75	12.87	9.45	11.98	14.57	11.60
Meghalaya	8.75	11.035	14.25	10.96	7.47	10.10	13.11	9.72
Mizoram	9.50	9.50	9.50	9.50	8.22	8.27	8.40	8.27
Nagaland	8.50	8.50	8.50	8.50	7.22	7.28	7.41	7.28
Sikkim	9.00	9.00	9.00	9.00	7.69	7.79	7.92	7.92
Tripura	9.00	9.00	11.50	9.02	6.73	7.78	10.38	7.80
NER	10.00	13.67	16.37	12.95	8.84	12.35	15.16	11.64
India	9.0	9.0	9.0	9.00	7.51	7.67	7.80	7.61

Source: NIPFP estimates

Note: GSDP is at fixed costs at 2006-07 prices

### (c). Poverty Eradication in North East

The vision of the people is to banish poverty from the region by 2020. The estimated poverty ratio in the region using the mixed recall period in 2004-05 was 17 per cent which was lower than the country's overall poverty ratio of 22 per cent, but the measure is beset with several problems and is unreliable. Apart from inadequate sample sizes for States other than Assam in the National Sample Survey (NSS), this general measure does not adequately take into account specific consumption requirements and higher costs of living of the region. Empowering people with capabilities ensures they receive adequate food, clothing and shelter so that every family is free from hunger, leads a healthy life and participates productively in the growth process. This, too, requires a structural change in the region from government-dominated economies and economic structures shaped by planning from above, to those based on participatory planning with private sector participation in the growth process.

The eradication of poverty, inequality and deprivation in democratic India should invariably be addressed in a participative, holistic manner reflecting the letter and spirit of the provisions



relating to 'The Panchayats' and 'The Municipalities' in Parts IX and IXA of the Constitution brought into force by the 73<sup>rd</sup> and 74<sup>th</sup> amendments to the Constitution, passed by the Parliament in December 1992 and gazetted in April-May 1993.

This will ensure grassroots development through democracy in a people-oriented and people-centric manner, with community supervision and people's control over the provision of basic services and public goods. Such assured access to entitlements is the surest path to poverty eradication, especially when livelihood sustenance is dependent on sustained and sustainable development initiatives at the village and mohalla level.<sup>1</sup>

Inclusive and sustainable programmes, and schemes through a participative process of planning and implementation call for substantial and concerted capacity building of Panchayati Raj and other institutions of local self-government as well as effective communitization. Such capacity building, of both the elected representatives (with special emphasis on SC/ST and women) as also of administrative and technical officials, should focus on all dimensions of poverty eradication including

- ◆ The Institutional Development perspective;
- ◆ The Human Development perspective; and
- ◆ The Participatory Development perspective.

The need for a thorough and comprehensive study of the profile of poverty in the North East is emphasized to lay the ground for an effective time-bound strategy of eradicating poverty. Such a survey must capture the multiple deprivations of the people of the North East, including the facets of

- ◆ Economic Poverty (EP);
- ◆ Nutritional Poverty (NP);
- ◆ Human Poverty (HP); and
- ◆ Basic Amenities Poverty (BAP),

which are inter-related but distinct, with the conviction that an in-depth analysis on these dimensions can alone help to understand the living conditions of the poor.<sup>2</sup>

A five-fold programme of development perspectives for the eradication of poverty in NER is elaborated below –

1. Economic Development Perspectives (EDP)
2. Institutional Development Perspectives (IDP)
3. Participatory Development Perspectives (PDP)
4. Human Resource Development Perspectives (HRDP)
5. Infrastructure Development Perspectives (Infr. DP)<sup>3</sup>

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<sup>1</sup> see volume II- Chapter III Poverty Eradication in North East.

<sup>2</sup> see volume II- Chapter III Poverty Eradication in North East.

<sup>3</sup> See volume II- Chapter III Poverty Eradication in North East.

#### **(d). Maximising Self-governance**

Maximising self-governance for the people and building capacity in people and institutions to achieve it in all the areas in the NER is extremely important not only for the political and economic empowerment of the people to determine their own destiny but also to create a sense of pride and belonging through participation in the development strategy. Sustainable peace and prosperity in the NER is possible only when people participate actively in political and economic decisions. Empowerment of the people comes from their active participation in government and control over resources, to determine resource allocation to various public services and determine the developmental strategy. Devolution of power to villages is necessary for participatory governance and economic progress. In areas covered under Parts IX and IX-A of the Constitution, the Panchayati Raj institutions need to be strengthened. However, large parts of the region are covered under Schedule VI of the Constitution and in these areas, village development councils will have to be activated and evolved to undertake grassroots planning. The State of Nagaland is covered under Article 371-A of the Constitution and the communitization process prevailing in the State should be developed to undertake developmental activities. Indeed, rejuvenation of institutions for such planning should be done in harmony with the traditional institutions in the region.

Active participation of people in the political processes and in grassroots planning can bring about the desired transformation of the region by helping to establish peace and set in motion the wheels of progress towards prosperity. The planning process will have to build upwards from the level of villages and wards with active participation of people. The selection of various projects and their prioritisation, adaptation of Central and State schemes to meet the priorities of the people, ensuring untied funds for implementation, and compilation of an information system required for planning and creation of a system of social accountability would empower people to determine their own economic destiny.


An equally important component of Vision 2020 is the establishment of peace and harmony. Security of life and property is essential for the happiness of the people. Besides, this is an important precondition for prosperity as it contributes to creating an investment climate in the region. There is a strong perception that the region is infested with insurgency. While much of the perception may not be accurate – large parts of the region are as peaceful as anywhere else in the country – it is necessary to deal with the issue of insurgency where it exists in a spirit of accommodation, pluralism and sub-nationalism.

#### **(e). Harnessing Resources for the Benefit of the People**

The vision of prosperity for the people requires participatory development by harnessing the resources of the region. The region is rich in resources, including natural resources such as land, water, minerals, forests and of course, people. It is also important to utilise the savings of the people which are deposited in financial institutions for investment in the region. The people would like to see the large river systems converted into a source of prosperity. Mineral wealth can be used to create opportunities to increase employment and income. They would like to harness the vast hydroelectric energy potential and use the comparative advantage to expand economic activities in







the region. They would like to see that the global public goods they provide through the vast forest cover recognised. They would like to overcome their saving-investment deficit by increasing the credit-deposit ratio through the generation of economic activity in the region.

Participatory development in agriculture will have to adopt a different approach in the hills and the plains. Tribal populations in the hills have practiced shifting (*jhum*) cultivation for generations. Indeed the shifting cultivation, when it started had a cycle long enough to recoup the soil fertility, but with the population pressure on land, the shifting cycle has got considerably reduced with enormous environmental damage. Although some people believe that this traditional system should continue as the tribals are comfortable with it, from the viewpoint of preserving forest cover increasing productivity, and improving the incomes and living conditions of the tribal population, it is necessary to gradually demonstrate the benefits of moving to settled cultivation. The progression from *jhum* to settled cultivation, particularly in horticultural crops, organic farming and smallholder plantations through proper extension services, could increase income levels in their own setting in a sustainable manner. In the short-run, however, until the tribals are weaned away, it may be necessary to minimize the damage of *jhumming* through measures such as ‘contour building’, growing pulses, and the use of improved seeds. In contrast, in the plains, the strategy would be to enhance land productivity by increasing crop intensity, making better use of water resources and a balanced use of organic manures and chemical fertilizers to make up for deficiencies in the soil. Using the resources of the region for development will strengthen backward linkages. A manufacturing sector based on these resources, particularly agro-based manufacturing, would help create productive employment opportunities. The enormous hydroelectric power potential and mineral wealth in the region could be tapped to create comparative advantage for private sector participation in manufacturing activity.

## **(f). Building Capacity in People and Institutions**

An important component of the people’s Vision 2020 is to achieve a high level of human development. Raising the quality of education and health is as much a goal in itself as it is a means to enrich the quality of life for people, and expand their life choices.

An important aspect of human development is building capacities of the population, through raising the quality of and access to health and education. The ability of the region to harness resources for sustainable development also requires significant private initiative and investment, which in turn depends on the availability of a skilled workforce. A development strategy based on the resources of the region will occur simultaneously with the emergence of a group of strong, indigenous entrepreneurs, which in turn calls for an enhancement of the skill levels.

An important factor constraining economic progress in the region is the poor capacity of both public and market institutions. Responsive governance is possible only when institutions have the capacity to undertake governance and developmental functions efficiently. Such planning requires capacity building right from the village level. It is necessary to facilitate such planning by creating district planning agencies and developing capacity in them to coordinate and implement plans right from the village level. There is an urgent need to clarify the roles of different institutions including

the roles of the NEC and the MDONER. The NEC should be evolved as a professional planning agency.

Capacity development is as important for market institutions as it is for government institutions. Most of the economic activities in the region are government-dependent and, as very high proportions of the resources of the States in the region come from Central transfers, development has been transfer-dependent. This has made the NER economy dormant and the markets for factors and products inactive. Often, the non-existence of markets in the region is seen as an indication of market failure calling for more government intervention. Indeed, government intervention is necessary to nurse market institutions and create conditions for them to grow and perform the task of intermediation. The promotion of markets and institutions to disseminate information on prices and products is extremely important.

### **(g). Strengthening Infrastructure**

The people in the region envision having state-of-the-art infrastructure not only to enhance the quality of life but also to dictate the pace of economic activity, and the nature and quality of economic growth. The infrastructure deficit is a major deficit in the region, and acceleration in economic growth and the region's emergence as a powerhouse depend on how fast this deficit is overcome. The lack of connectivity has virtually segregated and isolated the region not only from the rest of the country and the world, but also within itself. Poor density of road and rail transportation within the region has not only hampered mobility but also hindered the development of markets. The traditional transportation routes through inland waterways have become virtually non-functional after Partition and although the agreement with Bangladesh allows the transportation of goods, these routes have become inactive and in any case, the agreement does not permit transportation of people. The region is also poorly linked by air, and sea routes have been blocked. Air inter-connectivity between different States in the region is extremely poor the location of the air hub at Kolkata means that travelling even to neighbouring States has enormous costs in terms of time, effort and money. It is important to locate the hub at Guwahati to reduce the turnaround time within the region. The blocking of access to the Chittagong port and the land route through Bangladesh, has closed the sea transportation routes for the region altogether. Inland waterways, which were an important means of transportation, have all but vanished due to the complexities in the political and economic relationship with Bangladesh. Although the region has tremendous potential for generating hydroelectric power, the actual generation is less than 8 per cent of the potential.

Improving connectivity is an important precondition for social and economic mobility and market integration. With various insurgency groups operating in different parts of the region, land transportation within the region has become hazardous. Critical to improving connectivity are issues of diplomacy and an improvement in border infrastructure and trade facilitation with neighbouring countries, particularly China and Bangladesh. Diplomatic initiatives and an extension of the rail network to Chittagong could help open up India's access to the Chittagong port and significantly reduce transportation time and cost. Diplomatic initiatives could also help to open up access through inland waterways with neighbours, to provide better connectivity to the region.



## **(h). Creating a centre for trade and commerce**

The Look East Policy should focus on the North Eastern Region so that Southeast Asia should begin from North Eastern India. Opening up trade routes will expand economic opportunities for the region and accelerate its growth process. The region can regain its place as a centre of flourishing trade with East and Southeast Asia through the land (silk) route to China and Myanmar and through the sea port from Chittagong and Kolkata. Recent initiatives in improving relations with neighbouring countries, particularly the MOU with Myanmar, restoring border trade and, more importantly, the Ganga treaty with Bangladesh, have kindled hopes of resurgence of the region based on flourishing international commerce.

## **(i). Effective Governance: Establishing Peace and Harmony**

An integral part of the people's vision of development is of a land living in peace and harmony, and free from insurgency. Without peace, progress is not possible. Insurgency has taken a heavy toll on economic progress and people's happiness in the region. The people of the North East would like peace to return to their lives, leakages to cease and development to take precedence.

## **IV. Realising the Vision: The New Development Strategy**

The challenge of accelerating development in the North Eastern Region to realise the Vision is formidable, and the road to peace and prosperity is long and arduous. The people's vision requires a participatory development strategy. The High-Level Commission appointed by the Prime Minister in its report submitted in 1997 (India, 1997) has stated that there are four basic deficits confronting the North East and these are:

- ◆ A basic needs deficit;
- ◆ An infrastructure deficit;
- ◆ A resource deficit; and
- ◆ A two-way deficit of understanding with the rest of the country.
- ◆ To this should be added the governance deficit.

Overcoming these deficits will call for a paradigm shift in development strategy, supplemented by reforms in policies and institutions, including capacity building and strengthening governance.

## **(a). Components of the Development Strategy**

Inclusive development in the region requires participatory governance and planning, which calls for maximisation of self-governance. This requires the creation and activation of governance institutions right from the village level upward. There is a need for a complete shift in the


development strategy and the planning process towards designing and implementing people-centric programmes based on harnessing the natural resources of the region. Only such a strategy can ensure inclusive development, help alleviate poverty and ensure a reasonable standard of living for every family in the region. Participatory development requires capacity development of people as well as institutions, and here, education and skill development will be a cornerstone of the vision. Another important element of the strategy will be the creation of an enabling environment for market-based development, the most important component of which will be the establishment of peace, law and order and an institutional framework for ensuring property rights. Equally important is the need to provide state-of-the-art infrastructure, especially connectivity both within the region and with the rest of the world, to open up markets and increase mobility. The fortunes of the people of the region are inextricably intertwined with those of the people of Bangladesh, and there is much to be gained by removing trade barriers to enable access to seaports and inland waterways. Many of the problems of the region stem from weak governance, which has contributed to the rent-seeking, 'easy-money' culture, and created a law and order situation which has deterred investment.

**The six components of the strategy are:**

- I. **Empowerment of people** by maximising self-governance and participatory development through grass-roots planning. Decentralized governance from the village level onward, built with maximum participation of the people should ensure people's role in decision making and help create a responsive system. Grassroot plans, prepared and implemented from the village and ward levels and consolidated at the district level should help in the provision of public services according to the needs of people and the building of infrastructure to harness the resources of the region for people's benefit. Providing a secure and responsive environment is necessary for creating an economic climate for the development of the region which, apart from people's participation in planning, involves creating a secure climate for investment including protecting investors' property rights and ensuring a corruption-free administration. This would call for making the Panchayats effective governance institutions. However, the provisions of the Sixth Schedule of the Constitution apply to significant portions of hilly areas and here it is important to activate village development councils and undertake district planning exercises beginning from the villages. The State of Nagaland comes within the purview of Article 371-A of the Constitution and here planning should take cognisance of the prevailing system of communitization.
- II. **Creation of development opportunities** for a majority of the people living in villages through rural development initiatives. This calls for a rise in agricultural productivity through an expansion in the area under cultivation and increase in crop intensity. In hilly areas, it is important to expand horticulture, floriculture, plantation crops and organic farming. An expansion in agricultural extension and the creation of cold storages and market infrastructure are necessary to link markets to agricultural producing areas in the region. Even with improvements in agriculture, it would be difficult to provide productive employment to over 80 per cent of the population residing in rural areas of the region and therefore, expansion of non-farm economic activities in the rural areas is extremely important.





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- III. **Developing sectors with comparative advantage** so as to utilise the resources of the region productively for the benefit and welfare of the people. In particular, the focus on agro-processing industries and industries based on resources of the region are extremely important. Similarly, in the services sector, there is considerable potential for expanding tourism including high-value tourism such as hill and adventure tourism. Exploitation of the vast power generation potential could, in the short run, help to augment revenues and in the medium and long term could create cost advantages for making investments in manufacturing units.
- IV. **Capacity development of people and institutions** is an extremely important component of the strategy. Human development increases capabilities and with it enhances political and economic freedoms of the people. Creating state-of-the-art hospitals and higher educational institutions in the region could also attract people from neighbouring countries to avail the benefits, besides improving education and health security to the people of the region. It is also important to develop people's capacities to equip them to participate productively in economic activities. Capacity building of institutions should address both government and market institutions. Responsive governance and planning from below require significant augmentation of capacity. Similarly, large parts of the region are marked by severe market imperfections and non-existence of markets altogether. Considerable efforts are needed to create markets and improve them.
- V. **Creating a hospitable investment** climate is equally important. An enabling environment for private investment in the region would require significant public investment to create state-of-the-art infrastructure, especially connectivity both within the region and with the rest of the country, translation of the Look East Policy to promote economic relationships with East Asian and Southeast Asian economies and beyond, and ensuring proactive governance. Augmentation of the transport and communication networks and ensuring adequate and stable power supply will improve the quality of people's lives, and attract the private investment needed for development. The fortunes of the people of the region are inextricably intertwined with those of their neighbours, and there is much to be gained by removing trade barriers with the neighbouring countries to enable access to seaports and inland waterways.
- VI. Realising the vision will require significant **investment by both public and private sectors**. In the initial years, much of the investment required for strengthening physical and social infrastructure will have to come from governments—both the Centre and States, though with the passage of time and progress it may be possible to forge public-private partnerships. Ensuring adequate resources for public investment in infrastructure, implementing a framework for private participation in augmenting infrastructure and creating an enabling environment for the flow of private investments to harness the physical resources of the region for the welfare of the people are issues that need to be addressed on a priority basis. It is also important to ensure—for reasons of both efficiency and accountability—that States in the region do not depend entirely on outside capital, but also generate resources from their own tax and non-tax sources.



Implementation of the six components of the strategy will not be easy or straightforward, nor are these elements independent of each other. Their interdependence implies that they have to be calibrated simultaneously. Given the large number of stakeholders, the variety of groups demanding various concessions, and the international dimension mired in diplomatic tangles, various issues need to be addressed delicately, using both the carrot and the stick. The details of the five-fold strategy are spelt out in Volume II. In what follows, some essential elements of the strategy are laid out.

## **(b). Empowering people through inclusive governance**

Establishing peace, security and responsive governance are essential prerequisites for development. An integral part of a vision of development is of peace and harmony, and free from violent confrontations.<sup>4</sup> Armed conflict has taken a heavy toll on economic progress, goodwill and happiness in the region. Governance is weak and there are widespread leakages—of revenues that should have accrued to the public exchequer, of expenditures on various development schemes due to rent-seeking of various kinds, and of large amounts of funds through rigging of contracts, according to the NIPFP report. It is a fact that armed conflict, going back more than five decades, ‘has dampened private investment in potentially productive sectors’. The NIPFP adds, ‘Nor have initiatives by the Central and State Governments to accelerate development through various plans had the desired results. The system is full of leakages, perverse incentives towards economically productive initiatives and rent-seeking behaviour. In our view, added to poor governance, they create a situation of extreme tension and pressure, especially on the weak and vulnerable.’

It is therefore significant that ‘Inclusive Growth’ is both the title and the overarching goal of the Eleventh Five Year Plan. The key component of the ‘strategy of inclusive growth’ must be inclusive governance as the means of empowering the disadvantaged with the aim of enabling them to overcome their poverty. It is the effective empowerment of the disadvantaged through the effective devolution of Functions, Finances and Functionaries to representative institutions of local self-government such as Panchayats (where part IX of the Constitution applies) and Village Councils, Village Development Boards and similar such institutions elsewhere, on the principle of subsidiarity, which states that anything which can be done at a lower level should be done at that very level. This will pave the way to the effective implementation of other measures of inclusive growth such as:

- ◆ Stepping up investment in rural areas, in rural infrastructure and agriculture;
- ◆ Increased credit availability, particularly to farmers and others, and offering them remunerative prices for their crops;
- ◆ Increased rural employment, including the provision of a unique social safety net in the shape of the National Rural Employment Guarantee Programme;

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<sup>4</sup>Excerpts from North Eastern Region Vision 2020 Volume I Peace, Progress and Prosperity in the North Eastern Region: Vision 2020, National Institute for Public Finance and Policy, New Delhi, 2007, pg 8, 17



- ◆ Increased public spending on education and health care, including strengthening the mid-day meal programme and offering scholarships to the needy;
- ◆ Investment in urban renewal, improving the quality of life for the urban poor;
- ◆ Empowering the Scheduled Castes, Scheduled Tribes, Other Backward Classes, minorities, women and children socially, economically and educationally; and
- ◆ Ensuring that, through public investment, the growth process spreads to backward regions and districts of our country.<sup>5</sup>
- ◆ Ensuring that, through public investment, the growth process spreads to backward regions and districts of the North Eastern Region.
- ◆ Three-fold increase in annual allocations to rural development and welfare, and the launching of new schemes like NREGA, BRGF and RTI require involvement and supervision of village communities and their elected representatives
- ◆ It is important that Panchayat Raj be brought centre-stage as the principal governance reform to reinforce economic reform in such a manner as to secure inclusive growth.
- ◆ Gram Sabhas to be made functional and all elected representatives at the grass-roots level involved to enable equitable access to rural development and welfare schemes.
- ◆ In keeping with the federal structure of India, the North Eastern States should be given flexibility to articulate policies for optimizing the use of natural and human resources within their states, without of course losing touch with the greater national imperatives.
- ◆ Activating and strengthening institutions of local self government calls for conformity to certain broad and generally well-accepted principles of institutional design.
- ◆ Village councils or Dorbars should be elected every five years and mandatory representation for women ensured as in the case of PRIs.
- ◆ For effective local self-government, major governance reforms are required as much in Panchayati Raj areas in the North East Region as in exempted areas. Governance needs to be strengthened by (a) laying out clear policy objectives (b) concurrent audit (c) post completion audit in all of which communities themselves play a role.
- ◆ A Review and Monitoring Mechanism to ensure transparency and time-bound implementation of all projects above Rs. 5 crore, with representation from the concerned government line department, independent technical and audit specialists as well as from the NGO sector (working in the specific field) and local government (Panchayat/Council etc.)
- ◆ Activity Maps to be prepared or activated to clearly delineate the attribution of activities comprised within each devolved function to the appropriate tier of the three-tier Panchayati Raj system so that there is no ambiguity at any level about the tasks entrusted to them nor any overlapping of duties between different tiers.


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<sup>5</sup>Based on the foreword by the Prime Minister, Dr. Manmohan Singh, in *Report to the People 2004 - 2007*



- ◆ States with Panchayati Raj areas to clearly identify budgetary line items that ought to go to the Panchayats and separately earmark them through a Panchayat sector window in the budgets of the relevant State line departments to ensure the flow of funds for undertaking devolved activities to the Panchayats.
- ◆ By 2020 participative planning from the grassroots level upwards to culminate in the preparation of a district plan as a key step in the strengthening of Panchayats to be institutionalized as mandated in the Constitution. District Planning Committees (DPCs) are required to be *elected* to the extent of 80 per cent of the membership by and from amongst the elected members of the district level Panchayat (Zilla Parishad) and the Municipalities within a district. Most States falling under Part IX of the Constitution have now constituted DPCs, States like Nagaland, Mizoram and Meghalaya which have not begun this exercise need to expedite the process.
- ◆ Engagement of all stakeholders, particularly of historically discriminated and marginalized sections, including women, in participatory planning and implementation. This has to be done to assess the resources in the villages and towns, identify and priorities the needs and requirements and monitoring and evaluation of various projects, schemes and programmes.
- ◆ Devolution of adequate funds in an untied manner patterned on activity mapping of each level of governance. State Governments will need to undertake a detailed analysis of their annual budgets, both non-plan and plan, to separate allocations to be transferred to Panchayats in accordance with the activities devolved to them. The funds available under various schemes can be allotted to the projects selected and prioritized by the people.
- ◆ Streamlining and consolidation of schemes to ensure flexibility and a measure of autonomy. This has to be done mainly at the State and Central levels.
- ◆ Assignment of significant revenue raising powers and building capacity of local governments to raise revenues from the sources assigned to them.
- ◆ Attention must be paid to the democratization of the functions of TIs (Traditional Institutions), especially with gender representation. These include systems such as the Syiemships, Dorbars and Rangbah Shnong of the Khasi Hills, the Dolois of the Jaintia Hills and the Nokmas of the Garo Hills of Meghalaya as well as other groups such as the Kuki-Impis, various clubs, associations and peoples' organizations of Manipur, Nagaland and other States. TIs have varying levels of influence in different States although ally and their demand for such recognition may be considered if these institutions are democratized and representative of all groups, instead of being exclusive entities. The IFAD model described below as well as the Naga communitization process (for details see Volume II, Chapter One, Inclusive Growth through Inclusive Governance) are possible models to bring these into a greater democratic space, which protects their traditions but is respectful to other groups as well.
- ◆ The Autonomous Councils will have to become the harbingers of economic transformation and not merely be legislative, regulatory and administrative agencies. To effectively assume a central role in local development, they will need to adopt a more participatory approach.





Such a transition will need to emerge from within, as tribal communities themselves proceed to adapt their time-honoured traditional systems to the needs of inclusive participation and development. It may be desirable to consider the approach adopted in the Fifth Schedule areas, where democratic elections based on adult franchise and reservations to women in elected seats and leadership positions have been applied without reducing the importance of tribal customs and traditions.

- ◆ Para 4 of the Sixth Schedule makes a provision for village councils to be established by District or Regional Councils mainly for the dispensation of justice in disputes that involve two or more tribal persons. Examples of initiatives in communitization at the village level, aimed at harmonizing the ‘village community with the traditional tribal body’ which have shown significant success can be replicable models. The most celebrated example is Nagaland’s experience of communitization for effective public service delivery. Other examples include the NEC sponsored ‘North Eastern Community Resource Management Project’ (NERCORMP) in Assam, Manipur and Meghalaya involving the International Fund for Agricultural Development (IFAD). Examples drawn from the IFAD project have shown that unlike government schemes, the IFAD funded projects have not been afflicted by the malaise of extortion primarily because they are community-driven and people-owned. This vindicates the notion that many systems can co-exist if delivery mechanisms work.
- ◆ Meghalaya was granted Sixth Schedule status when it was a part of the composite State of Assam, mainly as a safeguard for customary laws and practices of tribal minorities. Now that the State is ruled by a tribal majority, there may be merit in examining whether the ADCs should continue in their present form. The continuance of an institution which is virtually a stand-alone body with few linkages either with the State Government or with village-based institutions merits reconsideration.

### **c. Gender Sensitive Governance: Key to Inclusive Growth**

There is an increasing need for local government reforms to be associated with improving service delivery through local governments. A major cross-cutting concern that merits more attention is the gender dimension of the local development and in particular women’s effective participation in it, to help meet their specific needs and address gender inequalities. Major indicators of gender equality are exercise of rights, social control, access to decision making and public voice to defend rights. Progress towards gender equality is slow, and this is in part due to the failure to attach money to policy commitments. Not enough attention is given to the impact of allocated resources and this serves to perpetuate gender biases, although budgets offer the potential to transform gender inequalities.

- ◆ Gender Budget Initiatives or Gender Responsive Budgets are tools and processes designed to facilitate a gender analysis in the formulation of government budgets and the allocation of resources. Gender budgets are not separate budgets for women, or for men. They are attempts to break down or disaggregate the government’s mainstream budget according to its impacts on women and men. The way in which national budgets are usually formulated



ignores the responsibilities and capabilities of men and women. Budgets formed from a gender-neutral perspective ignore the different impacts on men and women because their roles, responsibilities and capacities in any society are never the same. These differences are generally structured in a way that leaves women at a disadvantage in society by creating inequalities.

- ◆ Major issues relating to women and children in the NER are the persistently high infant, child and maternal mortality ratios. Other important concerns are the feminization of poverty and the exploitation of women in low paid, hazardous and insecure jobs in the unorganized sector. These issues require a sensitive approach which cut across all projects/ programmes and schemes. Good policy requires understanding both the impact of the policy and how it might be better designed to achieve outcomes which meet the needs of women, men, girls and boys as well as different groups of women, men and children. There is no single approach or model of a gender sensitive budgetary exercise. Evidence suggests that the economic gains of gender equality lead to increased output and better development of people's capacities.
- ◆ Gender Commitments must be translated into Budgetary Commitments. For re-prioritizing public spending we must prepare our 'bottom up budgets' and work for its realisation in collaboration with the elected representatives. Gender economists must lift the veil of statistical invisibility of the unpaid 'care economy' managed by poor women and highlight the equality & efficiency dimension and transform macro-policies so that they become women friendly.<sup>6</sup>

#### **(d). Accelerating Agricultural Growth, Rural Development and Expanding Non-farm Employment Opportunities**

Participatory development is based on harnessing the natural resources of the region, so it will give priority to the primary sector in the development process. Over 86 per cent of the population in the region resides in villages and, therefore, encompassing development is possible only with improvements in agriculture and allied activities. At present, of about 40 lakh hectares under cultivation, 39 lakh or over 97 per cent is under foodgrain production. At about 1,520 kg/hectare<sup>7</sup>, land productivity is very low in the region. Despite a vast potential, only 20 per cent of the net sown area is under irrigation. Almost 95 per cent of the region's soil is acidic with pH value below 5.6. *Jhum* cultivation, widely practiced in the hills by the tribal population has kept productivity low and contributed to deforestation and erosion of soil.

The target should be to increase foodgrain production in the NER to 75 lakh MT in 2010, 87 lakh MT by 2015 and 110 lakh MT in 2020, which would require accelerating the growth rate to 2 per cent in the first phase, 3 per cent in the second and 4 per cent in the third. This implies increasing the productivity of land to 1,570 kg/ha in the first phase, 1,610 kg/ha in the second phase and 1,650 kg/ha in the third.


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<sup>6</sup>see (Volume II- Chapter II Inclusive Growth through Inclusive Governance).

<sup>7</sup> Draft Vision VER 2020, Vol II. North Eastern Council. p. 36







There should be different strategies for accelerating growth in agriculture in the plains and the hill. In the plains, the goal should be to increase crop intensity by better utilisation of irrigation potential and cultivation of short-duration crops. In the plains, increasing the land area (about 1.5 million hectares) under double-cropping to 25 per cent in a phased manner would considerably enhance productivity. Measures such as expanding area under High-Yielding Varieties (HYV), more balanced use of organic manure and chemical fertilizers and pesticides, and steps to balance soil conditions to reduce soil acidity are needed (Borthakur, (2005). It is also important to expand the area under cultivation from the current 17.8 lakh/ha to 25 lakh/ha by bringing under cultivation, the cultivable waste land and areas developed under the command area development.

Controlling the annual floods in the Brahmaputra and Barak valleys and strengthening embankments to control soil erosion should be an important part of strategy for the development of agriculture in Assam and parts of Arunachal Pradesh. The elevated river bed along several sections of the Brahmaputra has increased over-bank discharge, expanded the area prone to floods, and increased erosion of the river banks. Several expert committees have made recommendations for flood control, with little effect on the devastating effects of annual floods on the marginalised population living along the whole stretch of the *chars* and *chaporis*. The Brahmaputra Board that has emerged as a regional institution to design, implement and monitor flood management strategies in the valleys of the NER, has also failed to evolve a workable solution. Various government schemes for flood management have been constrained by embankment failures on one hand and bureaucratic apathy and technocratic arrogance that exclude people's participation on the other. Measures to mitigate the fury of floods necessarily entail creation of flood-detention structures, which involves agreements between Arunachal Pradesh and Assam. In this context, the creation of 'trusteeship zones' in disputed areas bordering the two States could provide an opportunity to harness the water resource of the region for the betterment of living conditions of the dwellers in these areas.

In the hills, the tribal population has, for generations adopted shifting (*jhum*) cultivation. While the strategy should be to wean them away from this practice, this has to be done not through displacement, which would endanger their food security, but through persuasion and demonstration of alternative livelihood systems and building their capacity to engage in productive and sustainable livelihoods. There is tremendous potential for cultivating horticultural crops in the hills, but success depends on the development of rural infrastructure including marketing links, cold storages and processing facilities. Extension services need improvement, with better provision of good quality seeds, inputs and seedlings. The potential for growing various commercial crops such as tea, pineapple, large cardamom, oranges, banana, rubber and ginger have been clearly demonstrated in the region. Of course, some believe that expansion of rubber cultivation reduces soil fertility and should be replaced by other crops. In any case, there is a need for significant research and extension services to adopt improved practices and control pests, and for the provision of cold storages, transportation infrastructure, processing facilities and marketing support. At present much of the research in horticulture is conducted by the Horticulture Department of Assam Agricultural University in Jorhat, which needs to be upgraded to a national-level research organisation capable of serving the entire region. The Assam Small Farmers' Agri-business Consortium (ASFAC) station in Guwahati too will have to be upgraded to undertake research and development of horticulture

for the benefit of the region as a whole. Expansion of horticulture in tribal areas to replace *jhumming* is a challenging task and the strategy for this has to be worked out carefully. It is extremely important that the tribal population in the region should voluntarily adopt the practice after a demonstration of the gains.


Communitization as a developmental strategy will have a significant role in increasing the participation of people in development and historically the systems adopted in Nagaland in this are as important. A clear success story in communitization in rural livelihood systems is the NEC-sponsored North Eastern Community Resource Management Project (NERCORMP) in Assam, Meghalaya and Manipur involving the International Fund for Agricultural Development (IFAD). This is the largest and the most successful rural social livelihood project and the World Bank has shown interest in up-scaling it. The NEC estimates that if fruit production is taken up in 'Mission Mode' and with the provision of complementary infrastructure and services, by 2020 the area under fruit cultivation could be increased by 50 per cent (from the present level of 4 lakh hectares to 6 lakh hectares) and production of fruit crops could be raised from the prevailing 40 lmt to 60 lmt. The high fertility of virgin land in hill areas of the region is conducive for the introduction of organic farming of horticultural crops under the National Programme for Organic Production (NPOP). It would be useful to tie up with private sector companies both to introduce organic farming and to market the products. Companies such as Indian Tobacco Company and Dabur India have shown considerable interest in the region. To ensure economies of scale in their operation, it is important to take the initiative of harmonising the policies among different States in the region. The NEC should take the initiative of bringing States together to negotiate with large agro-processing firms. It is also important to encourage the formation of Self-Help Groups comprising fruit, vegetable and flower growers, and to arrange facilities for their training and micro-finance support.

The people of the region are predominantly non-vegetarian and the production of meat and eggs is inadequate to meet the demand. Thus, the NER has to import about 50 per cent of its milk consumption and over 87 per cent of the eggs consumed; over time as the population increases, this shortfall will increase. This shows the vast potential for expanding poultry and animal husbandry, which would increase productive employment as well as incomes. Similarly, despite nesting of large and small river systems, the region imports almost 55 per cent of its fish consumption from outside. Marketing and storage infrastructure will provide a boost to pisciculture, which will also create significant employment earning opportunities.

A thrust to agriculture and allied activities requires significant government initiatives in terms of providing rural infrastructure and extension services. An extensive rural road network is necessary to increase the mobility of people as well as the movement of goods, while the electrification of villages is necessary for increasing crop intensity and spreading rural industrialisation. Extension services are critical both for enhancing production and improving marketing and, therefore, need significant upgradation. Establishing a network of cold storage facilities and information centres and organising marketing and financial support through self-help groups will have to be initiated on a large scale.

Even as expansion in agriculture and allied activities such as animal husbandry, poultry, forestry and fisheries increase rural employment and incomes, the overwhelming dependence on





agriculture and resulting large underemployment and unemployment in rural areas will need to be addressed by creating non-farm employment opportunities. Thrust will have to be given to handlooms, handicrafts and traditional crafts by providing artisans with modern, computerised design, and exposure to technology and through creating access to markets. There is also considerable scope for promoting small-scale, agro-processing units like oil-extraction, and ginger and turmeric processing. The products from NE have a unique quality and texture and there is considerable scope for marketing them all over the world. These avocations will significantly increase non-farm employment opportunities for the rural population.

## **(e). Developing Sectors with Comparative Advantage**

### **(i) Strategy for the Manufacturing Sector**

Providing a thrust to sectors with comparative advantage will require focussing on manufacturing services based on the region's resource endowments. In the manufacturing sector, agro-processing industries will have to play an important role in the emerging scenario. Horticultural crops need cold storages and processing support and it would be necessary to tie up with the corporate sector for the processing and marketing of fruits and vegetables, including organic products. Similarly, there is considerable scope for expanding food-processing, handlooms and handicrafts, which currently provide the largest employment, after agriculture. Almost 96 per cent of NE is having International border & there is ample opportunity to develop trade & commerce in the region. The traditional ethnic designs can capture South-East Asian market which requires design inputs & skill development. In particular, there is considerable scope for the expansion of sericulture as the climate of the North East is congenial for the expansion of the silk industry. It is important to modernise the sector and help producers with design inputs, financial support and marketing assistance, including access to overseas markets.

There are about 181 large and medium-scale industries in the region, over 70 per cent of which are in Assam. Most of the units are based on resources, such as oil, gas and wood. Tea plays vital role in Assam's economy. Also the scope of downstream industries on petroleum & gas cracker project needs to be explored. The significant deposits of limestone in Meghalaya and Arunachal Pradesh can be used for setting up medium-sized cement industries by using the deposits of natural gas in the region. It is also important to augment production by exploiting the enormous hydroelectric potential of the region, as regular and quality power supply can be an important incentive for setting up manufacturing units. Regular power supply is also an important necessity for cold storage infrastructure. While in the initial years the increase in power generation may not be absorbed entirely and States would be able to generate financial resources by selling power to the national grid (as in the case of Sikkim), over time the absorptive capacity of the region for power consumption would increase and a significant portion of the power generated would be used for expanding economic activities.

### **(ii). Strategy for the Service Sector**

In services, the participatory approach will aim to accelerate growth by focussing on the development of non-governmental services and their interaction with agriculture and manufacturing.

Tourism is a sector with a very high potential for generating income and employment. With its moderate climate most of the year, scenic splendour, and robust and varied cultural attractions, the region is ideal for tourism. The focus, however, should be on high-value tourism which will require close collaboration with the private sector hospitality industry, building high-quality infrastructure and well-targeted promotion. Several tourist circuits could be developed in the region, depending on the attractions and experiences they present. Annual music and dance carnivals held in different parts of the North East, with national and international participation, could help attract visitors at these times. Similarly, tourist visits and circuits could be built around the colourful *Bihu* festival in Assam and *Dussehra* festival in Manipur, which could also be promoted. Hill tourism, skiing, river-rafting, adventure tourism, etc can be developed. However this should be done although in a sustainable manner, keeping in mind the fragile environment.

Other important services that present an opportunity for development are in the financial sector including banking, and insurance, the information technology industry. The IT industry however, requires significant capacity building, a larger emphasis within the education system towards mathematics and science, and creating the environment to induce information technology companies to operate in the region. Some information technology companies have found significant potential for sourcing employees in the region and it is important to create favourable conditions for their operation. Creation of education and training facilities for the youth of the region in Information Technology (IT) and Information Technology Enabling Services (ITES) could provide a great impetus in generating a pool of personnel increasing employment opportunities for the youth.


## **(f). Capacity Building of People and Institutions**

### **(i) Human Development and Manpower Planning**

Development of human resources is critical for the development of the region. While the literacy rate in the region is high, the employability of the youth in the region in skill-intensive activities and within the manufacturing and service sectors is not very high. The region does not have an entrepreneurial class to take up the challenge of generating economic activities. The structural transformation of the economy can only take place by creating and enhancing the multidimensional capacities that are linked to the human resource requirements for expanding the primary, manufacturing and service sectors. A focus on children, women and youth is also vital in this region. It is also important to emphasise the need to improve the human development indicators of the tribal population. Recent population growth in many of the NE States has meant that a substantial proportion of the population is younger than 14 years, in Arunachal Pradesh and Meghalaya, accounting for as much as 40 and 42 per cent of the State population, respectively. In its broadest sense, education will be the most critical input to empower these young people with the ability to expand their life's choices. Similarly, providing access and incentives for the education of women and tribal populations in the region is extremely important for its social and economic transformation and to provide sustainable livelihood systems. Besides expanding the educational infrastructure, particularly in technical areas such as engineering, medicine, information technology, and bio-technology, it is necessary to remove barriers in accessing education for tribal people and women through appropriate policies including creation of hostels in towns and special coaching for admissions and to improve their overall performance. Affirmative action will have to extend all the way from school education through to higher education levels. It is







also necessary to strengthen infrastructure for vocational education and skill development to enable the youth to improve their productivity and incomes.

Capacity building in the primary sector will have to focus on providing skills and training for improved agricultural practices. The transformation of the agricultural sector from subsistence to commercial farming will be based on farmers developing their capacity to adopt improved practices and market their products. Adoption of improved agricultural practices in the plains requires training through agricultural extension services to raise high-yielding, short-duration crops. In the hills, introducing horticultural crops and organic farming should gradually help the tribal population to switch from shifting cultivation to commercial crops. Surely, this requires significant efforts at building capacity for the cultivation of horticultural crops and organic farming. This also calls for building market institutions and strengthening the cold storage and processing facilities.

In general, as mentioned earlier, the literacy rate is high in the region, but this has not translated into employability in productive occupations. There also appears to be reluctance among people to enter into self-employment ventures, perhaps because of the absence of such a tradition in most NER States, so that those who do are first-generation entrepreneurs. This is evident from the slow response to various proposals for self-employment initiated by the Central and State Governments. However, the region has a large base of very talented people who, with training, can be gainfully employed in a variety of areas including agro-processing, information technology, paramedical, biotechnology, aviation, and the entertainment and hospitality industries.

At present youth in the region have few opportunities for expanding their horizons and realise their potential. Remedial measures need to be taken as early as primary and secondary school, where the goal will be to increase access to schooling for all, improve the quality of education, especially mathematics and science, through appropriate teacher training and curricula oriented to the local environments, and fully equipped schools and classrooms. There are few higher educational institutions, and the focus of those that exist has been to prepare the youth for routine government jobs. Indeed, the NEC has taken the initiative to constitute the North Eastern Regional Educational Council (NEREC) for the holistic development of education in the region. The NEREC's proposed 15-year perspective plan would do well to emphasise scientific and technical subjects such as engineering, mathematics, science, information technology and bio-chemistry. It is equally important to initiate measures aimed at qualitative improvements in the education system.

While there has been a tendency to emphasise general subjects in education, vocational education does not find the required focus. Skill development is extremely important to expand people's employment opportunities in the manufacturing and tertiary sectors and to create a pool of employable skilled personnel, which would act as an attraction for private investment. For example, the expansion of the hospitality industry, which has great potential in the region, requires a large number of trained personnel. In fact, development of the hospitality industry can expand employment opportunities, particularly for women. Similarly, increasing training opportunities in nursing can expand productive employment opportunities for women in the region. In fact, as the employability of people increases, the private sector will also enter to provide the required skills. Proper regulation of the quality of training and education and ensuring access to vocational education through proper financial support, such as bank loans, would also be required to improve the quality of the skilled workforce.



Focus on other aspects of human development such as basic health needs is equally important for capacity development. Health indicators in the region show significant improvement over the years, nevertheless, there is considerable scope for raising the health and nutrition status of the region especially for children and women. The shortage of medical specialists and lack of tertiary facilities in several States needs to be addressed, along with issue such as the high incidence of AIDS, cancer, malaria, and other diseases, and the wide gaps in rural-urban provisioning of basic services. Good sanitation and drainage, clean water, electricity and permanent structures for all homes are now considered necessities and pre-conditions for development. While States have made efforts to increase the reach of these services, thousands of households still do not have access to them. The poor access to amenities in rural areas coupled with the lack of non-farm employment opportunities has propelled young people to urban centres. Increasing urbanisation along with the expansion of the administrative sector over the past decade have in almost every State resulted in untrammelled, unplanned urban growth, and pressures on urban amenities, with serious implications for the environmental and economic sustainability of these towns.

An important part of capacity building is increasing awareness in the rest of the country about people in the NER, and within the region itself through increased social interaction. This would require promotion of sports and cultural exchanges within the North Eastern Region as also between the region and the rest of the country. Capitalising on the rich cultural heritage of the region by engaging the youth in creative activities while promoting a two-way understanding with the rest of the country is a possibly . Organising annual music and dance carnivals in different parts of the NER with competitions at the district, State and regional levels would increase youth involvement in creative activities. These events could become important tourist attractions, with national and international participation, which, with good publicity should attract a large number of tourists, who can be ferried through chartered flights. Increased sports activity including regular inter-district, inter-State and regional-level competitions would also engage young people creatively. This would, inter alia, require significant upgradation in sports infrastructure.

## **(ii) Building Capacity in Institutions**

Building capacity in the institutions is important for maximising self-governance, to design and implement planning at the grass root level and ensuring efficient delivery of public services. Creating institutions of self-governance right from the village level and activating them to ensure maximum participation of the people, particularly women and vulnerable sections, is necessary to maximise self governance. Planning will require capacity building at all levels beginning with villages and municipalities, at the block, district, State and even at the level of the NEC. The planning process, as mentioned earlier will have to start from the level of Gram Sabhas and Ward Sabhas in the areas covered under Part IX and IX-A of the Constitution and from VDCs in Schedule VI areas. In some States, it is necessary to create VDCs and build their capacity to design and implement plans. Capacity-building for planning entails preparation of plans, their implementation and instituting monitoring and control systems. Similarly, capacity building for efficient service delivery calls for proactive administration and instituting a system of checks and balances. This calls for capacity building at the level of government right from the village level and including the line departments of various ministries of the State Governments. Responsive administration requires competent personnel and special efforts will have to be put in place to ensure this. Given that many of the



States are small and there are considerable gains to be had by States working in coordination, the institutions for capacity-building could be created through joint initiatives by States in the region.

Capacity development is not confined to government departments alone. There is considerable need to educate the public on their rights and responsibilities and how to demand accountability from government departments. Similarly, there is a need to build capacity in various non-governmental organizations.

The NEC has the responsibility of coordinating the policies of different States, promote cooperation among them and undertake planning for the region. It is important to have people with sector specialisation in the various departments of the NEC rather than having people drawn from the military. The Council should develop capacity not only in coordinating policies and programmes among States but also in preparing and coordinating plans drawn up by different States through the grassroot process described earlier. It should also draw up plans for creating infrastructures spilling over to more than one State. Building capacity to design and implement plans, and undertake the task of monitoring and control is necessary to make it an effective institution in fostering the developmental process in the region.

### **(g). Strengthening Infrastructure and Connectivity**

The vision of peace and prosperity can not be realised without providing the region with world-class infrastructure and building a network of connectivity. Improving connectivity is the most important measure for the resurgence of the NER. Good transportation networks are necessary to inter-link potential growth centres, promote tourism, connect to border trade points and support economic, social and security needs. Creation of a common market is necessary for the region to develop as an entity and realise the goals of peace and prosperity (Barua, 2005). Faster movement of goods and people at lower costs is essential to provide impetus to economic activity. It helps the development of markets, reduces exploitation by middlemen, and in the process improves livelihoods of people in remote areas by enabling them to market their products at higher prices. By increasing social interaction among people of different States in the region, it promotes awareness and harmony. Opening up remote areas can also help improve the law and order situation, especially in areas affected by insurgency, and help protect people's property rights. All these are important preconditions for attracting the private investment needed for development in the region. In the human development context, better roads mean easier access to health centres for people and to schools for children, which, apart from being desirable outcomes in themselves, will promote a more productive and better skilled workforce.

The biggest constraint in the NER has been the poor state of infrastructure, in particular, roads, railways, waterways and power. At 66 km/100 sq. km area, the road length in the region is lower than that the average of the country (75 km/sq. km) and the quality of roads in the region is extremely poor. The total railway track length in the entire region is 2,592 km, with broad-gauge track confined to Assam. Inland waterways in the Brahmaputra and smaller rivers, such as the Kolodyne in Mizoram and Barak in Assam, have become virtually non-functional after the partition of the country and at best, they can be used for the transportation of goods and not people. Air connectivity to the region is poor: three of the State capitals do not have airports, and feeder services

from Delhi/Kolkata/Guwahati to the State capitals where airports exist are scarce. Most intra-regional connection is routed through Kolkata, which is expensive in terms of both time and money.

Realising the vision of peace and prosperity through participatory growth is impossible unless significant initiatives are taken to improve connectivity. Given the difficult terrain and strategic situation of the region, road density should be even higher than the national average of 75 km/100 sq.km. and the quality of the roads should be improved significantly to make them motorable. The Central Master Plan for road connectivity in the region should be executed at a faster pace and completed by 2015, and sub-divisional headquarters should be connected through all-weather roads. National highways need to be upgraded to four lanes. A detailed plan should be prepared and implemented for connecting all State capitals in the region with a broad-gauge rail line by 2020. Rail projects under construction must be completed by 2010 and more trains introduced, particularly from Guwahati to New Jalpaiguri. The extension of the railway line to Sabroom would improve connectivity to the Chittagong port. Air connectivity must be improved by shifting the hub to Guwahati from Kolkata. The nine old airstrips in different parts of the region should be developed for commercial use and a reliable private airline could begin operating regional air services between the different State capitals, with a hub at Guwahati, which could be subsidised until it becomes economically viable.

Activating inland waterways and providing access to the sea port requires significant diplomatic initiatives with Bangladesh. The eventual goal would be to have a common market with Bangladesh. Indeed, with the threat of terrorism looming large, and a number of terrorist groups reportedly operating from Bangladesh, a complete change in the mindsets of both countries would be beneficial. It will not be easy to initiate the process, but there are significant gains to be had for both countries from a common market. Access to the Chittagong port and opening up of the inland water route could lead to economic resurgence of the region. In fact, the Chittagong port is only 75 km from Sabroom in Tripura and could become an important gateway for India to East Asian countries. The construction of a bridge by India across the 110-metre wide Feni River, and helping Bangladesh modernise the Chittagong port, could go a long way in building confidence and goodwill for the benefit of the peoples of Bangladesh as well as of North Eastern India. Bangladesh could have access to Indian markets by enabling free trade in the land routes, which would mitigate its unfavourable balance of trade with India considerably. Besides, taking the gas pipeline from Myanmar to Kolkata through Bangladesh could enable the latter to earn substantial amounts by charging transit fees. The people-to-people contact could bring in greater understanding and social harmony.

Infrastructure and connectivity could support the Look East Policy and provide an impetus to trade with the Eastern part of the globe. Although the policy has been in place for a decade and a half and has benefited the rest of the country appreciably, the NER has gained very little. It is important to note that the NER shares 98 per cent of its borders with the neighbouring countries of Bhutan, Nepal, China, Bangladesh and Myanmar and the Look East Policy focus on the region can help it to access the markets in East Asian and Southeast Asia. Indeed, there is considerable potential for the policy to benefit the region but that would call for a qualitative change in the relationship with the neighbouring countries, particularly the larger countries of Bangladesh, China and Myanmar. Given that the fortunes of over 38 million people depend on good neighbourliness, the bureaucratic and defence-dominated approach to relationships must give way to the one based on mutual economic gains. A qualitative change in the relationship is necessary to improve connectivity, provide for better management of water resources of the region including flood



control, foster trade and improve cultural exchanges. Bangladesh, by allowing transit facilities for goods and gas pipelines from Myanmar to India can charge transit fees which could significantly reduce the trade imbalance with India. The latter, on her part should unilaterally abolish import duties on Bangladesh goods traded in the areas bordering Bangladesh, which could also help to reduce the trade imbalance, besides improving confidence between the two countries. Given the implications of good neighbourliness to the NER, there must be a consultation process for involving the States of the region with the Ministry of External Affairs, and the MDONER should play a vital role in facilitating the consultation process. Furthermore, the policy focus of the Look East Policy should shift so that South East Asia begins with North Eastern India itself. To this end, it is necessary to build bridges – diplomatic and infrastructural. Therefore, since the late 1990s, India has taken a number of measures to expand its trade with East Asia. Apart from economic and trade-related factors, closer links with Bangladesh and Myanmar are crucial to the issue of controlling insurgency in the NER States. On the other hand, China is an economic hotspot in the world today and needs to be factored into India's economic and foreign policies.

Despite improvements in infrastructure linkages at points like Moreh, very little trade benefits seem to accrue to the NER States. This is probably due to the fact that existing trade agreements (like the one with Myanmar) are restrictive towards trade in agricultural products. This is also true of agreements on border trade with Bangladesh and China (*via* the Nathu La). Yet, it is these products that have the potential for trade in the NER in the near future. Sikkim however, is likely to benefit as a 'transit location' for border trade with China, but this may not bring in significant dividends to other NER States.

The Prime Minister of India, during the SAARC Summit in May 2007 announced that India would follow a duty-free policy with the least-developed SAARC countries from 2008. This is an important measure and calls for immediate follow-up to ensure its smooth implementation. The most important and immediate initiative required is the significant upgradation of infrastructure along the borders to facilitate trade and ensure the faster movement of goods to and from neighbouring countries. In fact, facilities such as approach roads, telecommunications, electricity, weighbridges, customs/immigration posts and bonded warehouses should be taken up on a priority basis. Initially, support should be given to private initiatives to start restaurants, petrol bunks, repair stations, banks, cyber cafes, convenience stores and repair stations. In fact, this should be taken up on both sides of the borders in Bangladesh, Bhutan and Nepal through persuasion and assistance to these countries, as a border infrastructure bottleneck on either side could hinder the movement of goods.

## **(h). Raising Resources for Development**

Critical to implementing the development strategy to realise the vision of peace and prosperity to the region is the issue of raising the required resources. Indeed, much of the investment will have to come from the private sector and the government will have to create an enabling environment for private initiative in economic activities. This will include controlling insurgency, improving governance, creating world-class infrastructure and developing people's capacity to participate in economic activities.

In creating the enabling environment, therefore, public expenditure has to play an important role and State Governments will have to significantly enhance the level of spending on development



and also improve the efficiency of delivery systems. Meeting basic needs such as elementary and secondary education, primary healthcare, water supply and sanitation, anti-poverty interventions, and housing, and ensuring law and order, are important for this process. State Governments will have to allocate the required resources for the purpose.

An analysis of State finances in the region shows that the dependence of the NER on subventions from the Centre is overwhelming. Thus, fluctuations in Central transfers add to volatility in spending at State levels. This also creates a patronage syndrome, increases mutual suspicion and reduces social accountability. Analysis shows that in 2005-06 the contribution of own-revenue in the region was just about 20 per cent of States' total revenues and the remaining was received as tax devolution and grants from the Central Government. In fact, when Assam is excluded, the share of own-revenue to total revenue falls to just about 11 per cent. On the other hand, a much larger proportion of the income of the people in the region is taken by insurgent groups as 'taxes' and extortions. Thus, while people continue to pay a much larger proportion of their income as taxes to the government and insurgent groups, the government receives only a small proportion of this.

Augmenting the quality and supply of public services such as education, healthcare, drinking water, sanitation, housing, and building a network of village and district roads and State highways would require significant commitment of additional resources by State Governments. Public investment is also required to increase irrigation potential in the region and harness water resources. It is important that States in the region mobilise additional resources from tax and non-tax revenue bases assigned to them. At present, the tax-GSDP ratio in every State in the region is far below the national average of 7 per cent. The own-tax-to-GSDP ratio ranged from 1.0 to 2.5 per cent in all the States, except Sikkim (6.5 per cent), Assam (4.8 per cent), and Meghalaya (3.4 per cent). With the introduction of Value Added Tax (VAT), the buoyancy of tax revenues is likely to improve. More importantly, immediate measures to strengthen the tax administration and institute a modern information system could enhance revenue productivity.

Revenue increases from States' own sources, though important and necessary, will not bring in the large volume of resources necessary to provide the required levels of public services and infrastructure. There is a significant need to augment infrastructure spending directly by the Central Government for building national highways, a rail network, and airports and ensuring access to the sea route. Given the strategic location of the region and the paramount importance of infrastructure in promoting peace and prosperity, the Central Government will have to allocate a much higher proportion of resources for strengthening infrastructure in the region.

The Shukla Commission estimated the overall investment requirements for basic minimum services and infrastructure at Rs. 22,758 crore during the mid-1990s. It recommended the creation of a non-lapsable Central pool with an annual accrual of Rs. 1,500 crore (Planning Commission, 1997). However, actual investment during the last few years has been less than a third of this amount, thus adding to the backlog. If the overall growth rate of the region has to be accelerated to 11.5 per cent, the investment requirements of the region are staggering, and much of it will have to come from the private sector. For this to materialise, the creation of an enabling environment is critical.





## V. Converting Dreams into Reality

The vision of achieving peace and prosperity outlined above is eminently feasible but by no means easy. Realising the vision requires mobilisation of the people. Implementing a people-based development strategy, infrastructure development, building capacity, and responsive administration and governance will attract significant investment and open up avenues for the development of the region. Acceleration in the growth of the agricultural sector will benefit over 80 per cent of the people who reside in rural areas. Capacity development of the people should equip them to take advantage of the expansion in manufacturing and services. The strategy of development outlined in the document, thus, can promote all encompassing development in the region to realise the vision of achieving peace and prosperity.

The six components of the strategy described in the previous paragraphs are interdependent and therefore, need to be designed and implemented concurrently. Maximising self governance is critical to establishing peace and development and the latter contributes to improved governance. Peace will bring in development dividends and vice versa. Development requires infrastructure and capacity development. Similarly connectivity can dampen insurgency. All these can be done only when there is an appropriate environment for which responsive administration is necessary.

The formulation of the five-year plans should take into account the overall vision outlined in this document and adopt the development strategy to implement the plans. We have lost opportunities in the past and any further delay in adopting an integrated development strategy will only further delay the development of the region and alienate the people. It is hoped that this document will bring into focus the vision of peace and prosperity the North Eastern Region and the Eleventh Plan will initiate operationalising the and strategy to realise people's dreams.



Union Minister of Panchayati Raj Shri Mani Shankar Aiyar launching Panchayati Mahila Shakti Abhiyan in Lawnglai, Mizoram

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## Abbreviations

1. ADRP : Annual Direct Recruitment Plan
2. ANM : Auxiliary Nurse and Midwife
2. APEDA : Agricultural Processed Food Product Export Development Authority
3. ASHA : Accredited Social Health Activist
4. ASI : Archeological Survey of India
5. BDR : Business Development Resource
6. BOT : Build Operate Transfer
7. BRO : Border Roads Organization
8. C-NES : Center for North East Studies & Policy Research
10. CONCOR : Container Corporation of India
11. CRRI : Central Road Research Institute
12. CSS : Centre for Sustainable System
13. DGBR : Directorate General of Border Roads
14. DGPS : Differential Global Positioning System
15. DONER : Development of North Eastern Region
16. DOPT : Department of Personnel and Training
17. DRDA : District Rural Development Agency
18. GIS : Geographical Information System
19. HYV : High Yield Variety
20. IGNOU : Indira Gandhi National Open University
21. IL&FS : Infrastructure Leasing & Financial Services
22. IMR : Infant Mortality Rate
23. ISO/HACCP : ISO/Hazard Analysis & Critical Control Point
24. IWAI : Inland Waterway Authority of India
25. IWT : Inland Water Transport
26. JNNURM : Jawaharlal Nehru National Urban Renewal Mission
27. MDM : Mid Day Meal
28. MMR : Maternal Mortality Rate
29. MNRES : Ministry of New and Renewable Energy Sources
30. MOU : Memorandum of Understanding
31. NEC : North Eastern Council

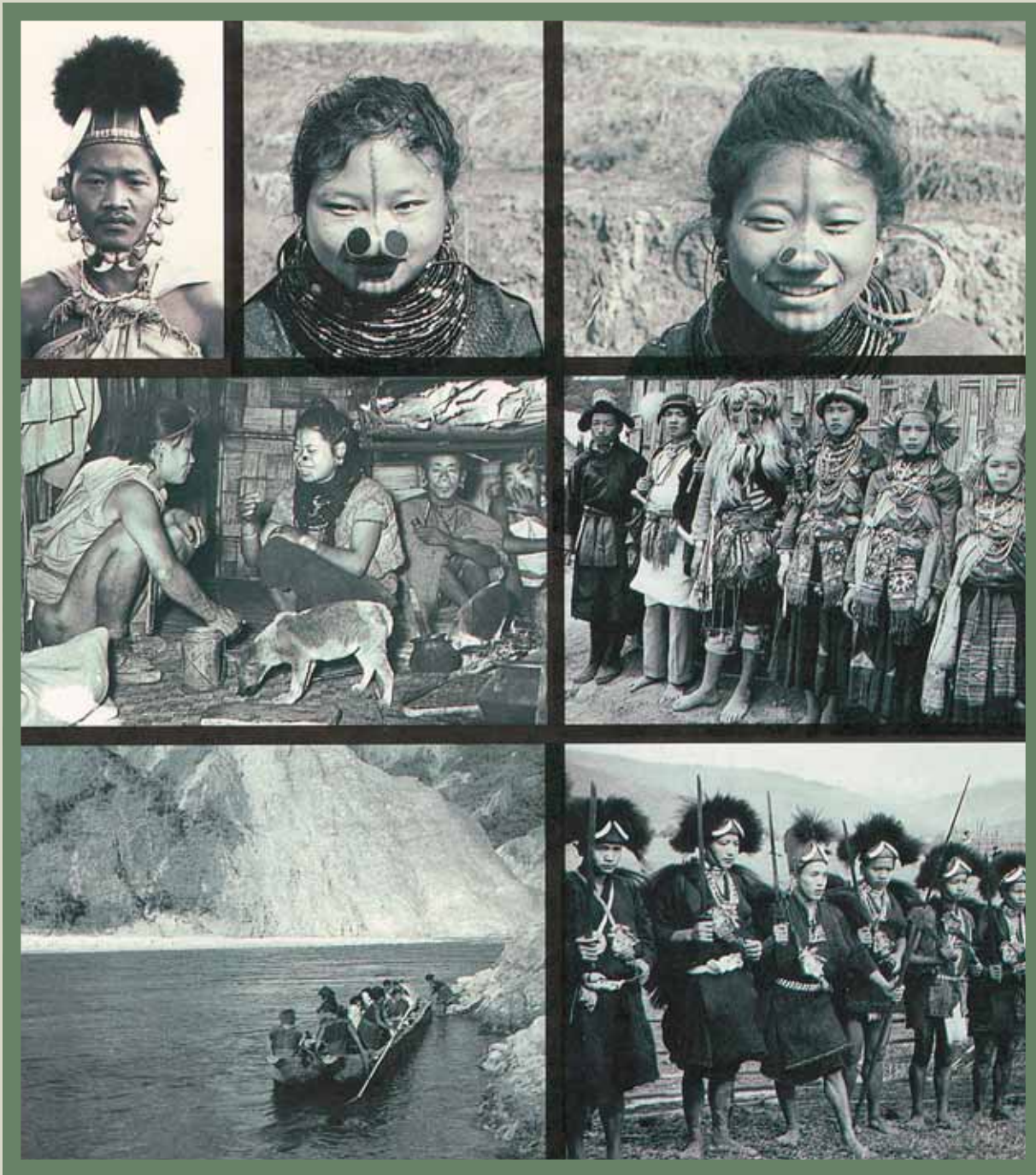
32. NEDFI : North Eastern Development Finance Corporation Ltd.
33. NEEPCO : North Eastern Electric Power Corporation
34. NER : North East Region
35. NERAMAC : North East Regional Agricultural Marketing Corporation
36. NH : National Highway
37. NHAI : National Highway Authority of India
38. NHDP : National Highway Development Programme
39. NIEPA : National Institute of Education Planning & Administration
40. NLCPR : Non Lapsable Central pool of Resources
41. NSS : National Social Service
42. NRHM : National Rural Health Mission
43. NSDP : Net State Domestic Product
44. NTDC : North Eastern Tourism Development Corporation
45. NW : National Waterway
46. ONGC : Oil and Natural Gas Corporation
47. PGCIL : Power Grid Corporation of India Ltd.
48. PHC : Primary Health Centres
49. PMGSY : Pradhan Mantri Gram Sadak Yojna
50. PURA : Provision of Urban Amenities in Rural Areas
51. RGGVY : Rajiv Gandhi Grameen Vidyutkaran Yojna
52. SARDP-NE : Special Accelerated Road Development Programme for North East
53. SCERT : State council of Education Research & Training
54. SHG : Self Help Groups
55. SHP : Strategic Healthcare Programme
56. SSA : Sarva Shiksha Adhiyan
57. TRA : Tea Research Association
58. TTAADC : Tripura Tribal area Autonomous District Council
59. UPASI-TRI : UPASI Tea Research Foundation
60. VDBs : Village Development Board
61. VECs : Village Education Committees







*Glimpses of the Past*



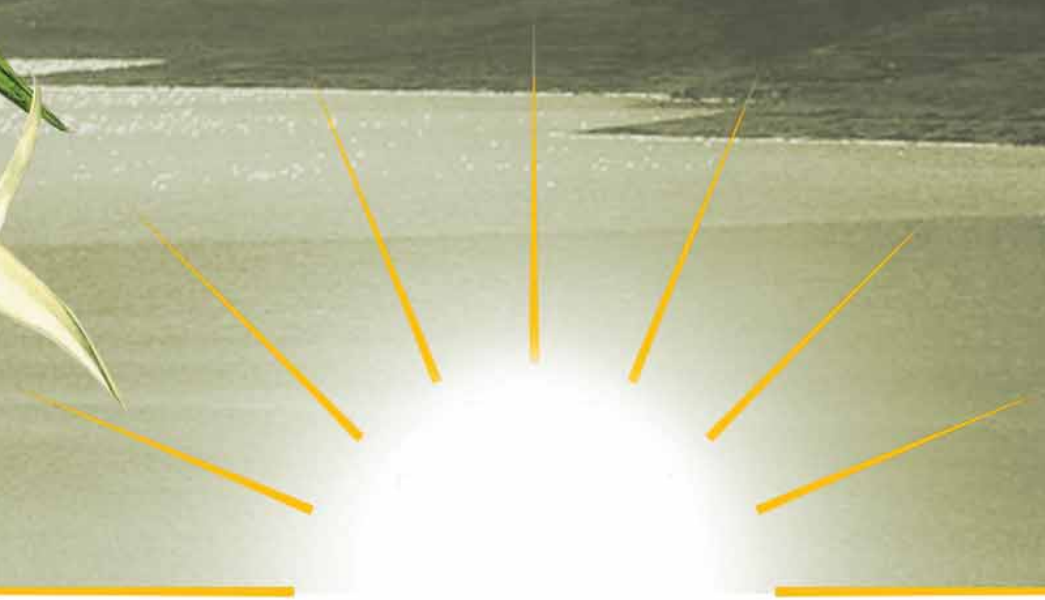
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Peace, Progress and Prosperity in  
the North Eastern Region  
VISION 2020

# SECTORAL STRATEGIES FOR THE REGION

**Volume -II**





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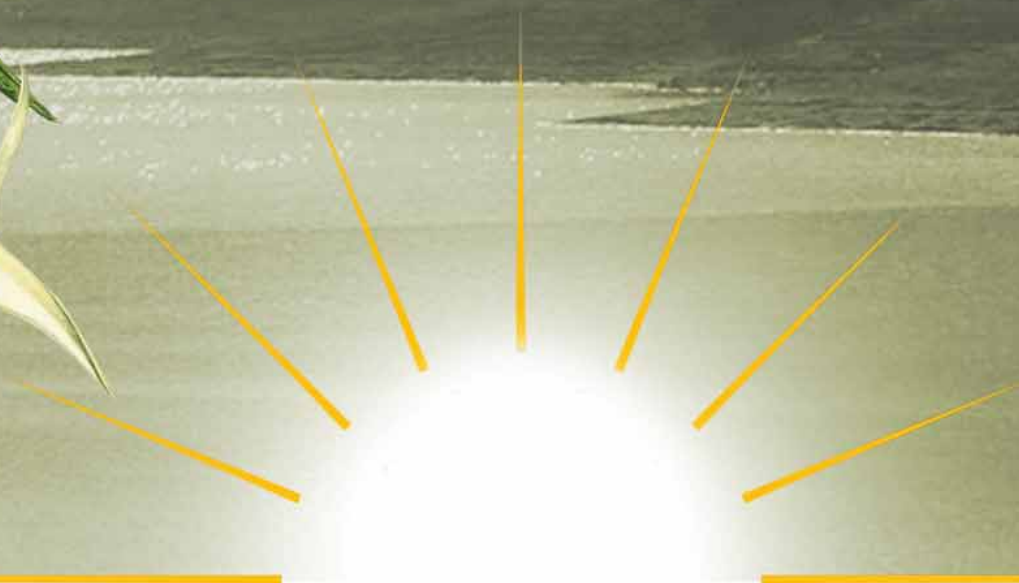
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# SECTORAL STRATEGIES FOR THE REGION





# SECTORAL STRATEGIES FOR THE REGION

## The North Eastern Region: Profile and Projection

The North Eastern Region (NER) extends to north and east of the narrow Siliguri corridor and comprises Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. These eight States cover an area of 2,62,189 sq. km. constituting 7.98 per cent of the country's total geographical area and account for only around 3.79 per cent of the total population of the country (2001 Census). The region has a long international boundary, about 96 per cent, with China and Bhutan in the north, Myanmar in the east, Nepal in the west and Bangladesh in the south and west. Most of the hill States in the region like Arunachal Pradesh, Meghalaya, Mizoram and Nagaland are predominantly inhabited by tribal people with a fairly high degree of diversity even within the tribal groups.

It would be erroneous to consider the region as a homogenous entity. The significant linguistic, ethnic and cultural diversity, not only among the people of different States but also within each State in the region, is an important feature that needs to be taken into account in designing policies and programmes. Marked by diversity in customs, cultures, traditions and languages, the region is home to over 200 of the 635 tribal groups in the country, speaking a variety of Tibeto-Burmese languages and dialects with a strong tradition of social and cultural identity. Each of the States has its own history and the tribal groups in the States have their own culture, tradition and governance systems. The region is a treasure house of exceptional natural beauty, floral and faunal biodiversity and abundant mineral, water and forests resources.

The political and administrative milieu of the region has gone through several changes from pre-colonial to colonial and post-colonial times (Vergheese, 2004). Besides, the partition of the country in 1948 imposed severe economic handicaps on the region. Although the various States in the region have made some socio-economic progress, this has not been sufficient to propel the region out of its low equilibrium to a higher sustainable growth path. The Eleventh Plan envisages higher growth in GDP and more importantly inclusive growth requiring rapid increase in employment, significant improvement in human development, particularly of the disadvantaged sections and a sharp decline in poverty. All these underline the necessity and urgency with which the NER needs to be brought in sync with the rest of the country to enable it to participate as an equal partner in India's march to progress.

This report presents a vision of the development goals of the people of NER and the strategy and approach that would best serve to achieve these goals. Unlike other reports, it has a regional perspective aimed at integrated development through cooperation among constituent States, built on a foundation of participative planning and implementation. The section that follows gives a brief description of the region, placing it in the context of development and growth in the rest of the country.

## 1.1 The Land and Its People

The NER is home to 39 million or about 3.8 per cent of the total population of the country, of which 68 per cent live in the State of Assam alone. Apart from Tripura, the population of all the NER States grew at a much faster rate than the national average in the 1980s and 1990s, with Nagaland's population growth reportedly touching 64.46 per cent in the latter decade (Table 1.1).<sup>1</sup> Migration is seen as an important factor contributing to high population growth. Most of the States in the region (apart from Assam and Tripura) are sparsely populated, with densities far below the national average. Arunachal's population density is only 13 people per sq. km. and Mizoram's is 42. Within States, densities vary greatly depending on the terrain, with fewer people in hill districts than in the plains.

**Table 1.1: Population Growth and Density**

States	Population (lakh)			Decadal Growth (%)		Density*	Urban Population (%)
	1981	1991	2001	1981-91	1991-01	2001	2001
Arunachal Pradesh	6.3	8.6	11.0	36.8	28.0	13	20.4
Assam	180.4	224.1	266.6	24.2	18.9	340	12.8
Manipur	14.2	18.4	22.9	29.3	24.9	108	23.9
Meghalaya	13.4	18.8	23.2	32.9	30.8	103	19.6
Mizoram	4.9	6.9	8.9	39.8	28.8	42	49.5
Nagaland	8.8	12.1	19.9	56.1	64.5	120	18.8
Sikkim	3.2	4.1	5.4	28.5	33.1	86	11.1
Tripura	20.5	28.6	32.0	34.3	16.0	304	18.0
India	6,833.3	8,464.2	10,288.4	23.9	21.5	324	28.8

Source: Office of the Registrar General of India, Ministry of Home Affairs.

Note: \* Population density is measured in number of people per square kilometer.

The region is predominantly rural with over 84 per cent of the population living outside towns and cities (except in Mizoram where only half the population lives in the villages and Manipur where around 76 per cent are rural). Since the 1990s, however, Arunachal Pradesh, Mizoram and Sikkim have registered an increase in urban population, as people have started moving to towns and cities in search of better livelihood opportunities and better access to basic services.

The region is identified as one of the world's biodiversity hotspots; it hosts species-rich tropical rain forests, supports a diverse flora and fauna and is the centre of origin of several crop species. The reserves of petroleum and gas in the region constitute a fifth of the country's total potential. Other mineral resources, forests and water resources (rivers, streams and rivulets) are also available in abundance. However, the region is yet to harness the vast developmental potential of these resources for the benefit of its inhabitants.

<sup>1</sup> According to the Chief Secretary of Nagaland, 14-15 lakh would be a realistic population figure for Nagaland in 2001. Assuming that the population in the State in 2001 was 14.5 lakh, the decadal growth rate works out to 19.8 per cent.



## 1.2 Social Characteristics

The North East is home to over 200 of the 635 tribal communities in the country, most of whom live in the hill States of Mizoram, Nagaland, Meghalaya and Arunachal Pradesh, and form an overwhelming majority of the population of these States. The tribal population constitutes about one-fourth of the population of the region. In four States, i.e., Mizoram, Meghalaya, Nagaland and Arunachal Pradesh the tribal people comprise a majority of the population.

The total literacy rate of the population in the region at 68.5 per cent, with a female literacy rate at 61.5 per cent, is higher than the country's average of 64.8 per cent and 53.8 per cent, respectively (Table 1.2). Mizoram has the second highest literacy rate in the country, while Assam, Arunachal Pradesh and Meghalaya are below the country average.

**Table 1.2: Demographic Profile of the Region** Per cent

State	Literacy Rate			Sex Ratio*	Scheduled Castes in Total Population	Scheduled Tribes in Total Population	Population Below the Poverty Line
	Total	Male	Female				
Arunachal Pradesh	54.8	64.1	44.2	901	0.56	64.22	33.5
Assam	64.3	81.9	56.0	932	6.85	12.41	36.1
Manipur	68.9	88.9	59.8	988	2.88	34.20	28.5
Meghalaya	63.3	66.1	60.4	985	0.48	85.94	33.9
Mizoram	88.5	90.8	86.1	938	0.03	94.46	19.5
Nagaland	68.1	81.8	61.9	909	0.00	89.15	32.8
Sikkim	69.8	86.8	61.5	885	5.02	20.60	36.4
Tripura	83.8	81.5	65.4	950	18.38	31.05	34.4
India	65.4	86.0	54.3	933	16.20	8.20	26.1

Source: 1. [www.censusindia.net/results/index.html](http://www.censusindia.net/results/index.html).

2. NEDFI Databank Quarterly, April 2005.

3. Below poverty line figures are from the Tenth Plan, Volume III.

Notes: \*Sex ratio is number of females per 1,000 males.

All figures are for 2001, except for the BPL population which is for 1999-2001.

## 1.3 Poverty Trends

In spite of good progress in poverty reduction it remains a concern in all NER States, especially in Assam and Sikkim. Poverty estimates of the NER States are, however, limited. They are based on consumer expenditure data collected by the National Sample Survey (NSS) relating to Assam. Only price variations and the rural-urban population shares influence State-specific estimates. Studies show that there are marked differences in the nature of poverty between the valley and the hills. However, the egalitarian basis of tribal societies which form a majority of the population in the hill States means that these States do not have the 'abject poverty found in many other parts of India.'<sup>2</sup>

<sup>2</sup> NEC Secretariat: Annual Plan 2008-09 for the North East.

## 1.4 The Economy of NER: Level and Composition of GSDP

### 1.4.1 Per Capita Income Levels

The Gross State Domestic Product (GSDP) is an important indicator of the economic development of a State. Per capita income broadly represents the overall level of living of the people. An analysis of NER shows that (i) the per capita income level in the region is significantly below the average of the country; (ii) the divergence in per capita income between the country and the region has shown a steady increase over the years; and (iii) there are significant differences in the levels of living between different States, between the people of urban and rural areas and between people in the plains and hill areas of the region.

Ironically, the region was at the forefront of development almost 150 years ago. Its rich natural resources supported significant economic activities. The proximity to Chittagong port, a network of inland waterways and land transportation through road and railways provided the support network for the transportation of goods and people. The railway network between Dibrugarh and Chittagong was one of the earliest projects implemented by the erstwhile colonial rulers in the late 19<sup>th</sup> century. The natural transportation route through East Bengal not only reduced physical distances but also provided emotional closeness. A rapid spread of tea gardens followed the establishment of the first tea garden in 1835 and the export of the first consignment of tea to London in 1838. The discovery of oil in Makum and the establishment of a refinery in Digboi in 1890 laid the foundation for the development of undivided Assam. The colonial rulers found significant potential for the exploitation of natural resources and invested in infrastructure in the region.

The partition of the country in 1947 was extremely retrogressive for the nation. It changed the economic landscape of the region, virtually disconnecting it from the rest of the country. The only link that remained was the narrow 28 km. Siliguri corridor. It severed access to the Chittagong port to make it land-locked and blocked natural transportation routes to cut off market access. In fact, per capita income in the undivided State of Assam was higher than that of the country's average on the eve of independence. Even during the 1950s and the 1960s it was higher than the average of the country, but the trend was reversed in the 1980s and the divergence continued to widen thereafter. Thus, in 1995-96, per capita income of the region at 1993-94 prices (Rs. 6,890) in the region was 80 per cent of the national average (Rs. 9,804). In 2004-05, as the country's average per capita income increased to Rs. 14,031, the region's income increased only to Rs. 8,869 constituting just about 62 per cent of the national average. In other words, while the per capita income in the country in real terms increased at the average annual rate of 3.89 per cent, the region's per capita income increased only at 3 per cent. In fact some of the States like Arunachal Pradesh, Assam, Mizoram and Nagaland registered a decline in their per capita incomes during 1995-2000.

### 1.4.2. Structure of State Income

As in the rest of India, an overwhelming proportion of the population of the northeast depends on agriculture for its livelihood, but a large majority of the people engaged in agriculture have subsistence living. The population residing in the rural areas of NER in 2001 constituted

84.39 per cent of the total, but the income generated from agriculture on average during 2000-04 was just about 26 per cent, while the contribution of the primary sector as a whole was 34 per cent. This is marginally higher than the contribution of the agricultural and primary sectors in the country at 20.2 per cent and 24.4 per cent, respectively (Table 1.1A in Annexure 1.1). In contrast, the share of the secondary sector at 16.9 per cent was much lower than that of the country (23.4 per cent). The contribution of the service sector at 49 per cent in NER was marginally lower than that of the country at 52.2 per cent. Within the service sector, NER had a significantly higher share of public administration (10.6 per cent) than that of India (6.3 per cent).

Thus, the NER is characterized by low levels of manufacturing and non-governmental service activities resulting in the population's overwhelming dependence on the agricultural sector. This general observation, however, obscures inter-State differences within the region. The dominance of Assam in the economic landscape of NER replicates the picture. In Assam and Nagaland, the contribution of the primary sector was over one-third, but in Sikkim it was lower than the national average. Services share was higher than the national average in Mizoram and Sikkim. However, public administration contributed 21 per cent in Mizoram and 17.5 per cent in Sikkim. It is also seen that over time, there has been a gradual decline in the share of the primary sector in almost all the States in the region except Nagaland and Tripura (Table 1.2A in Annexure 1.1).

## 1.5 The Way Forward

People in the region, like those in the rest of the country, have a vision of achieving prosperity and happiness for their children, if not for themselves. In the least, they would like to catch up with the standard of living in the country by 2020. If the national economy grows at an average annual rate of 9 per cent; and the population grows at a rate of 1.26 per cent; the per capita GDP is likely to grow at a rate of 6.65 per cent to give a per capita level of Rs. 87,459 by 2020 (Table 1.3A in Annexure 1.1).<sup>3</sup> To achieve this level of income in 2020, the GSDP in NER has to grow at an average rate of 12.95 per cent from 2006-07 to 2019-20 and the per capita GSDP has to increase at an annual average rate of 11.64 per cent (Table 1.4A in Annexure 1.1).

It must be noted that per capita GSDP in NER during 1995-96 to 2004-05 grew at just about 3 per cent per year and since 2000-01, it was marginally higher at 3.6 per cent. Given that the required growth rate of per capita GSDP to catch up with the rest of the country in 2020 is 11.6 per cent, the region has to accelerate its growth rate of per capita GSDP by more than three times the present rate. If the region grows at this rate, the country could grow even faster and the challenge of catching up could remain. But there will be significant improvement in the living conditions of the people and the large differences in the levels of living seen at present will substantially narrow down.

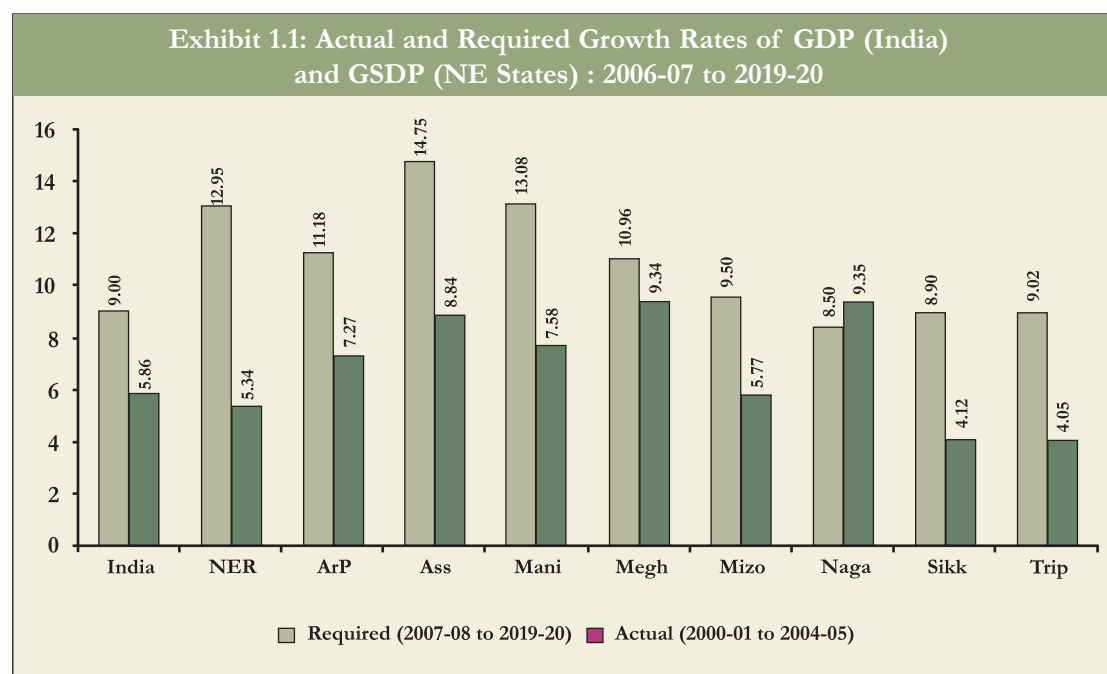
Achieving this order of acceleration in the annual growth rate of GDP is a daunting task and has to be carried out in phases. Table 1.5A in Annexure 1.1 presents phased acceleration in the growth of GSDP in the region which may be taken as indicative. According to this, the growth rate

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<sup>3</sup> We have taken the growth rate of 9 per cent—the target growth for the country for the Eleventh Plan—as indicative to highlight the magnitude of the developmental challenge of the region to catch up with the rest of the country.

of GSDP in the region should accelerate to 8.64 per cent during the Eleventh Plan, 12.35 per cent during the Twelfth Plan and 15.16 per cent during the Thirteenth Plan, if the goal of achieving the per capita income level of the country is to be achieved by 2020. This would require significant acceleration in manufacturing and non-government related service sectors to mitigate the region's dependence on the agricultural sector. Acceleration in growth in manufacturing and services sectors should, however, expand employment opportunities to absorb those released from the agricultural sector.

The average picture presented above hides significant inter-State differences within the region. In the past, GDP in different States of the region has grown at very different rates resulting in wide variations in per capita income levels. While the people of the region aspire to be equally prosperous, this would require differential growth targets for different States. Indeed over time, with increased connectivity and interaction within the region, migration of people can help to achieve a measure of convergence. Nevertheless, different States in the region will have different growth targets. The plan-wise growth target for each State (shown in Table 1.5A in Annexure 1.1) indicates that a significant acceleration in growth is required for each State, with States presently growing faster requiring more moderate acceleration. Thus, Mizoram, Nagaland, Sikkim and Tripura which are presently growing at annual rates ranging from 8.5 to 9.8 per cent would have to grow at 9.5, 8.5, 9 and 9.02 per cent, respectively. In contrast, Arunachal Pradesh, Assam, Manipur and Meghalaya, which are presently growing at less than 6 per cent, will have to grow at 11.18 per cent, 14.85 per cent, 12.88 per cent and 10.96 per cent, respectively.



Although the required acceleration in growth rates to achieve the target is slightly lower in some of the smaller States of the region, they will have to undergo structural changes to expand the productive sectors of their economies. It is important to note that economic activities in these States are predominantly determined by the government with public administration constituting a major proportion of their GSDP. The vibrant growth in these States would require significant structural changes to expand the role of the market and the private sector in determining their economic activities. This in turn calls for the creation of a climate for undertaking investments in the region to harness the resources in a productive manner for creating employment and income earning opportunities for the people of the region.

## 1.6 Resource for Investment


The required acceleration in the growth of GSDP in the region would necessitate massive additional investments as well as significant improvement in productivity. At the prevailing national Incremental Capital-Output Ratio (ICOR) of 4, the increase in investment required works out to Rs. 1,329,891 crore (Table 1.6A in Annexure 1.1) at 2006-08 prices or 48.1 per cent of the GSDP during the period. This works out to an estimated investment of Rs. 211,613 crore (or 35.3 per cent of GSDP) during the Eleventh Plan; Rs. 505,499 crore (47.7 per cent of GSDP) during the Twelfth Plan and Rs. 6,12,779 crore (55.6 per cent of GSDP) during the three years of the Thirteenth Plan period. An alternative estimate of investment by assuming declining ICOR from 4 during the Eleventh Plan to 3.6 during the Twelfth Plan and 3.2 during the Thirteenth Plan periods places the total investment requirement at Rs. 1,156,785 crore or 41.9 per cent of GSDP in the region for the period. While the two estimates made under alternative assumptions look very large in absolute terms, as a proportion of the GDP of the country they are 1.5 per cent and 1.2 per cent respectively. Surely, the nation can spend this order of investment in the region.

### 1.6.1 The Mix of Private and Public Investment

The large investments necessary for development will have to come from both the public and private sectors. This would require creating proper incentives and environment, the most important being the creation of world-class infrastructure and connectivity. Since, the partition of the country has made the region land-locked, connectivity has to be improved not only between the region and the rest of the world but also within the region. This will help in creating and expanding markets for the products of the region and help in faster movement of goods and people. Provision of world class infrastructure and connectivity would require a significant increase in public investment in infrastructure. Given that the entrepreneurial activity in the region is slack, in the initial years the government will also have to play a proactive role and make investments in promotional areas as well.

Thus, both Central and State Governments in the region will have to make large investments to overcome the infrastructure deficit, particularly in the initial years, though in course of time, it should be possible to involve the private sector in this task through Public-Private Partnerships (PPPs). In order to enable this, it is necessary to create a proper framework for public-private partnerships in infrastructure investments. Budgetary support for public investment too needs to be augmented to provide the required volume of viability gap funding.





Vision 2020 for the people does not imply merely increasing per capita income levels as improvement in per capita income is necessary but not sufficient to improve the welfare of the people. Besides improving per capita incomes, Vision 2020 includes the economic, social and political empowerment of the people. Political empowerment arises from participatory governance. Decentralized governance with active participation of the people is an end in itself as it empowers them. It is also a means to ensuring participatory development and earning economic and social empowerment. In local governance, while some parts of the region are covered by Schedule XI of the Constitution, there are significant parts that are covered under the Sixth Schedule and Nagaland is entirely covered by special arrangement under Article 381-A. The region has a strong tradition of local self-governance and it is important to ensure that the institution of governance established in the different States of the region should work in harmony with Traditional Institutions (TIs).

An equally important component of Vision 2020 is peace and harmony. Human security, an end to the disruptive bandhs and work stoppages which characterize life today in many parts of NER and mutual respect are central for peace and harmony in the region. This represents an important ingredient in developing and maximizing opportunities for investment. There is a strong perception that the region is infested with insurgency. While much of the perception is incorrect—large parts of the region are as peaceful as anywhere else in the country—it is necessary to deal with the issue of insurgency in a spirit of accommodation, pluralism and sub-nationalism.

While increase in income levels provide material prosperity, leading to the happiness and welfare of the people, it is also important for ensuring human development. Improving the living conditions of the people and banishing poverty, eradicating illiteracy and reducing maternal and infant mortality are necessary not only as they contribute directly to human happiness but also because they enhance capabilities. Increases in capabilities contribute to an increase in freedoms—freedom from hunger, freedom to choose avocations and employment and freedom to make informed political and social decisions.

## 1.7 The Way Forward

The Vision 2020 detailed above requires a significant change in the development strategy. The entire strategy has to rely on the bedrock of decentralized governance and within its framework, participatory planning. Strengthening the institutions of decentralized governance, working in harmony with traditional institutions of local self-governance and planning and building grassroots planning within its framework can bring the insurgent groups into the mainstream of development. It is also necessary to engage with the groups in the spirit of sub-nationalism and recognizing their ethnic and group identities. Controlling insurgency and creating responsive governance is critical to peace and development in the region. Peace brings in prosperity and vice versa, and the two need to be dealt with simultaneously. The creation of a proper climate for development in the region is equally important. Appropriate strategies will have to be evolved to ensure participatory and encompassing growth in each of the productive sectors in agriculture, manufacturing and services. Capacity development of the people to meaningfully participate in economic activities is as important as development strategies for the sectors. Capacity development is equally important for the institutions in the region to take up a promotional role for private participation in economic activities.

It is widely believed that the approach to development adopted hitherto has not helped in creating a developmental momentum in the region. Much of the investment made in the region has spilled over the jurisdiction and has not produced the required degree of backward and forward linkages. Besides, the pattern of development enjoined in that strategy has not involved the people. Thus, the development strategy proposed for NER calls for a complete shift in planning and implementation from 'top-down' to 'people-centric' and 'people-determined' programmes, based on harnessing the resources of the region, creation and expansion of the markets and attracting private sector participation in economic activities. This will ensure inclusive development, help alleviate poverty and ensure a reasonable standard of living for every family.

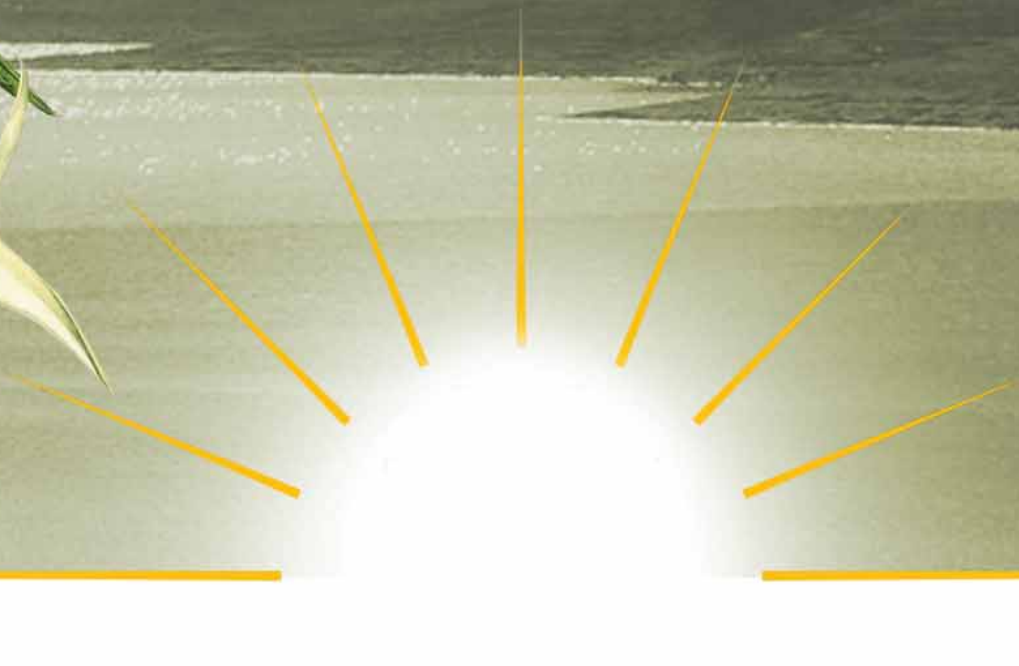
The six components of the strategy are:

- (i) Empowerment of the people to maximise self-governance and participatory development through grassroots planning. Providing a secure and responsive environment is necessary for creating an economic climate for the development of the region. Besides people's participation in planning, this includes creating a secure climate for investment including protecting investors' property rights and ensuring a corruption-free administration.
- (ii) Expanding opportunities for a majority of the people living in villages through rural development initiatives encompassing acceleration in agricultural growth and the creation of non-farm employment and economic activities in rural areas.
- (iii) Developing sectors with comparative advantage so as to utilize the resources of the region productively for the benefit and welfare of the people.
- (iv) Capacity development of the people and creating and building capacity of governance and development institutions both in the private and public sectors. Developing people's capacities will equip them to participate productively in economic activities and to benefit from the changes in the economy. Creation and capacity building of institutions will help in grassroots planning, develop the markets and generate a climate for investment and opportunities. Human development is not merely a means to realizing the vision, but is by itself a component of the vision.
- (v) Equally important is the creation of an investment climate by providing state-of-the-art infrastructure, especially connectivity both within the region and with the rest of the world, translation of the Look East Policy for the benefit of the region and ensuring a proactive governance. Augmentation of transport and communication networks and power infrastructure will improve the quality of people's lives and attract the private investment needed for development. The fortunes of the people of the region are inextricably intertwined with those of their neighbours, and there is much to be gained by removing trade barriers to enable access to seaports and inland waterways.
- (vi) Realizing the vision will require significant investment. Generating adequate resources for public investment in infrastructure, implementing a framework for private participation in augmenting infrastructure and creating an enabling environment for the flow of investments to harness the physical resources of the region for the welfare of the people are issues that need to be addressed on a priority basis.



Chapter 2

**INCLUSIVE GROWTH  
THROUGH INCLUSIVE  
GOVERNANCE**







# Inclusive Growth through Inclusive Governance

## 2.1. Inclusive Growth and Inclusive Governance: An Overview

**2.1.1** 'Inclusive Growth' is both the title and the overarching goal of the Eleventh Five Year Plan. The key component of our 'strategy of inclusive growth' must be inclusive governance as a means of empowering the disadvantaged with the aim of enabling them to overcome their poverty. It is effective empowerment of the disadvantaged through the effective devolution of functions, finances and functionaries to representative institutions of local self-government such as Panchayats (where Part IX of the Constitution applies) and Village Councils (VCs), Village Development Boards (VDBs) and similar institutions elsewhere, on the principle of subsidiarity, which states that anything which can be done at a lower level should be done at that level and no higher level, that will pave the way for the effective implementation of other measures of inclusive growth such as:

- Stepping up investment in rural areas, in rural infrastructure and agriculture;
- Increased credit availability, particularly to farmers and others and offering them remunerative prices for their crops;
- Increased rural employment including the provision of a unique social safety net in the shape of the National Rural Employment Guarantee Programme (NREGP);
- Increased public spending on education and healthcare, including strengthening the mid-day meal programme and offering scholarships to the needy;
- Investment in urban renewal, improving the quality of life for the urban poor;
- Empowering the Scheduled Castes (SCs), Scheduled Tribes (STs), Other Backward Classes (OBCs), minorities, women and children socially, economically and educationally; and
- Ensuring that, through public investment, the growth process spreads to backward regions and districts of our country.<sup>1</sup>

**2.1.2** The hard fact is that while India is prospering, most Indians are not. Although over the last four years India has witnessed a sustained GDP growth rate of 8-9 per cent per annum, which is set to rise even higher, poverty levels remain unacceptably high. The Gini co-efficient tilts against the 800 million or so Indians who are still to access the higher trajectory of growth. In this sense, the rich-poor divide has increased and poverty reduction figures in India are now lower than those in Bangladesh. More than 300 million people in India still live in deep poverty at less than a dollar a day while another 350 million live on less than two dollars a day. There are also disparities among regions, States, sectors and communities. Among the States, the North Eastern Region as a whole and the central regions, which have large tribal populations, are lagging behind. Among sectors, agriculture has fallen behind industry and the service sector. Although some of the poorest

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<sup>1</sup> Based on the foreword by Prime Minister, Dr. Manmohan Singh, in *Report to the People 2004-2008*.



States are rich in natural and forest resources, the predominantly tribal population in these States needs to be enabled and empowered to take advantage of this. Large sections of the Scheduled Castes (SCs) and Scheduled Tribes (STs), religious minorities and women in all social categories and across the country still do not have access to many job opportunities and human development. The informal sector, which has emerged as the largest job creator, is characterized by low wages and income insecurity while wage growth is concentrated at the top end of the organized sector. The Report of the Arjun Sengupta Committee on the unorganized sector has brought into sharp relief the pressing need to reinforce accelerated growth with inclusive growth.

**Table 2.1: Areas in the NER Not Covered Under Parts IX and IX A of the Constitution**

State/Area within a State	Provisions under which exempt
Nagaland	Exempt under Article 243M and not covered under Sixth Schedule
Hill areas of Manipur	
Meghalaya	Exempt under Article 243M and covered by the provisions of the Sixth Schedule
Mizoram	Exempt under Article 243M, with some areas of the State covered by the provisions of the Sixth Schedule
Bodoland, North Cachar and Karbi Anglong districts of Assam	Covered under Sixth Schedule

**2.1.3** Local self-government, as elaborated in our Constitution, provides the essential means of reconciling ‘accelerated growth’ with ‘inclusive growth’. We cannot secure inclusive growth without inclusive governance. The virtually three-fold increase in annual allocations to rural development and welfare, and the launching of new schemes like the National Rural Employment Guarantee Act (NREGA), Backward Region Grants Fund (BRGF) and Right To Information Act (RTI), are inadequately impacting on inclusive growth because governance at the grassroots is still far from inclusive. Too large a proportion of the centre’s Rs.81, 000 crore per annum for rural development and welfare reaches the people—if it reaches them at all—through Government-run or officially managed silos. Too small a proportion of it is actually planned and implemented with the participation, involvement and supervision of village communities and their elected representatives. If Gram Sabhas are largely non-functional and most elected representatives (other than Panchayat presidents) left uninvolved and, therefore, frustrated, this is because even as they see more and more money being poured into rural areas, they also see that much of it is beyond their control or responsibility. The overarching components of governance include (a) policy formulation (b) implementation and (c) monitoring and evaluation. If these three components are tightly packed there is little room for manipulation and corruption. Policies formulated by the centre and superimposed on States are often at odds with ground realities. They do not reflect the aspirations of the people and defy the very logic of governance which is meant to be participatory in nature and where people are at the core of policy making.

**2.1.4** That this should be so is an anomaly considering that Constitution amendments have so firmly rooted Panchayati Raj in our system of governance that 3.2 million elected representatives, including 1.2 million women and well over 22 per cent SC/ST (their estimated share in the rural population), are serving in the local bodies of our vibrantly democratic society at the grassroots. This anomaly is caused by:

- (i) Inadequate effective devolution of finances and functions by State legislatures/governments to Panchayati Raj Institutions (PRIs); and
- (ii) Inadequate provisions for planning and implementation by PRIs in the guidelines issued by Central Ministries for centrally sponsored and Central sector schemes that directly impinge on inclusive growth.

It is important that Panchayati Raj be brought centre-stage as the principal governance reform to reinforce economic reform in such a manner as to secure inclusive growth (parallel measures of empowering the grassroots are required in those areas, many in the North East, which the Constitution exempts from Panchayati Raj, such as the Sixth Schedule areas).

**2.1.5** The purpose of the Constitutional amendments that were first placed in Parliament in 1989 by Prime Minister Rajiv Gandhi and eventually enacted in 1992 as Parts IX and IXA of the Constitution, dealing respectively with institutions of local self-government in rural India and urban India, came about from the recognition, to quote Prime Minister Rajiv Gandhi, that we needed to take 'Power to the People'. The expression 'Power to the People' is, of course, Leninist in origin but it was not in the Leninist sense that Prime Minister Rajiv Gandhi used this expression; rather it was in the Gandhian sense. Mahatma Gandhi believed that the function of our democracy is to serve the people, beginning with their immediate neighbourhoods. He, therefore, called for self-governing 'village republics'. We have now arrived at the stage where institutions of local self-government, numbering nearly 2,50,000, have been irrevocably institutionalized and established virtually country-wide, particularly after Constitutional sanction and sanctity was accorded to Panchayati Raj through the 73<sup>rd</sup> and 74<sup>th</sup> amendments to the Constitution (passed by Parliament in December 1992; gazetted and entered into force in April-May 1993). Now, in addition to about 554 directly elected members of Parliament and about 4,500 directly elected Members of State Assemblies, making a total of approximately 5000 elected members at the higher reaches of democracy, we have about 3.2 million elected representatives at the grassroots in areas covered by Part IX and Part IXA of the Constitution, besides other kinds of institutions of local self-government in the exempted areas. It is critically important now that we succeed in empowering institutions of local self-government with the functions, the finances and the functionaries that are essential for the running of effective local self-governance. Only when this is done will high and accelerating rates of growth get translated into growth for the people.

**2.1.6** Activating and strengthening institutions of local self government calls for conformity to certain broad and generally well-accepted principles of institutional design. Holding of regular elections to local bodies; clarity in the functional assignments of different levels of local bodies in rural and urban areas; matching the devolution of functions with the concomitant devolution of funds and functionaries so that the devolved functions might be effectively performed; ensuring that elected representatives of local bodies effectively wield their powers; building capacity in local bodies to undertake planning; ensuring a healthy, constructive and mutually fruitful relationship between officials appointed by the State Government and elected local bodies and; providing for collective decision-making through Gram and Ward Sabhas and holding the local body to account for its performance are some of the features of a good design for local self-government. In addition, it is important to create systems and institutions for planning and delivery of public services, including the creation of information systems and those for monitoring evaluation and ensuring accountability.



**2.1.7** As suggested by the National Commission to review the working of the Constitution in its chapter on 'Empowering and Strengthening of Panchayat Raj Institutions/ Autonomous District Councils/ Traditional Tribal Governing Institutions in NE India', the functioning of Autonomous District Councils (ADCs) should be amended to make them more accountable through the insertion of a clause that makes the creation of village councils/bodies with a fair representation for traditional institutions without giving the latter any primacy mandatory. Village councils or *Dorbars* should be elected every five years and mandatory representation for women ensured as in the case of PRIs.

**2.1.8** Government policy is looking beyond just maintaining rapid growth to making growth more inclusive by addressing imbalances in the pattern of growth: too few jobs, too little growth in agriculture, lagging States and regions and groups and people left out of the path of progress. The foundation of these efforts is empowerment, which is key to expanding equity of opportunity. But while social protection remains one element of inclusive growth, empowerment does not seek to protect people from the market but rather seeks to facilitate opportunity for all in the market. This makes empowerment foundational both for greater accountability and service delivery as well as for spreading the benefits of economic growth.

## 2.2. Systems of Inclusive Governance in the North East Region

**2.2.1** Systems of decentralized governance in NER show a wide diversity, unparalleled in any other region of the country. While the Panchayati Raj system fully covers two of the eight States of the region Sikkim and Arunachal Pradesh, three other States Mizoram, Meghalaya and Nagaland are entirely exempted and have their own local systems. The remaining three States of Assam, Tripura and Manipur have both Panchayati Raj and non-Panchayati Raj areas existing side by side. Such diversity is as it should be, even though it makes local governance exceedingly complex. Adding to the complexity is the fact that local governance is based on the immense ethnic, linguistic and religious diversity seen in the region. However, a common feature of these diverse systems of self-governance is that they all need strengthening. This is as true of NER as it is of most parts of the country.

**2.2.2** For effective local self-government, major governance reforms are required as much in Panchayati Raj areas in the North Eastern Region as in the exempted areas. Governance needs to be strengthened by (a) laying out clear policy objectives (b) concurrent audit and (c) post-completion audit in all of which communities themselves play a role.

**2.2.3** Although Sikkim, Arunachal Pradesh and parts of Assam, Tripura and Manipur are covered under the provisions of Part IX of the Constitution, the extent of powers devolved upon Panchayats in these States is uneven. Sikkim has been adjudged the third best State in the country in the implementation of Panchayati Raj; Assam the best for activity mapping; Tripura and Manipur among the better States for their pattern of devolution and; Arunachal Pradesh has been commended for recent steps taken to move towards effective devolution. Yet, in all five States, there is considerable scope for advancing the cause of devolution. Happily, all the five States are party to the 150





conclusions of the seven Round Table Conferences held in 2004 covering all 18 identified dimensions of Panchayati Raj, reinforced by Memoranda of Understanding or joint statements of conclusions signed by the Chief Minister and the Union Minister of Panchayati Raj in all five States, to reinforce the consensual action points of the Round Tables with State-specific action points. These documents are reproduced in Annexure 2.2 A. The accelerated implementation by State and Central Governments of these agreed points of action will contribute greatly to securing inclusive growth through inclusive governance in the North Eastern Region. This then is the crucial foundational perspective for NER Vision 2020.


## 2.3 Steps to be Taken on a Priority Basis for Strengthening Panchayati Raj in NER

**2.3.1** Activity maps need to be prepared or activated to clearly delineate the attribution of activities comprised within each devolved function to the appropriate tier of the three-tier Panchayati Raj system so that there is no ambiguity at any level about the tasks entrusted to it nor any overlapping of duties between different tiers. The States are at various stages of implementation and coverage with regard to activity mapping (Table 2.1A in Annexure 2.1): while in all the concerned States in NER, preliminary work on the assignment of functions has been completed, these still need to be universally formalized and operationalized. Since activity mapping is the trigger for the devolution of finances and functionaries, States need to expedite this (an educative model which may be replicated for other functions is given in Table 2.1A in Annexure 2.1 and activity mapping by distribution of functions into district Panchayats, intermediate Panchayats and village Panchayats is shown in Table 2.3A in Annexure 2.1)

**2.3.2** Sikkim and Assam have completed their activity mapping. Sikkim's activity mapping includes detailed assignment of funds to Panchayats as also precise details of the officials who will be attached to each Panchayat for the performance of devolved activities. Assam's activity map is







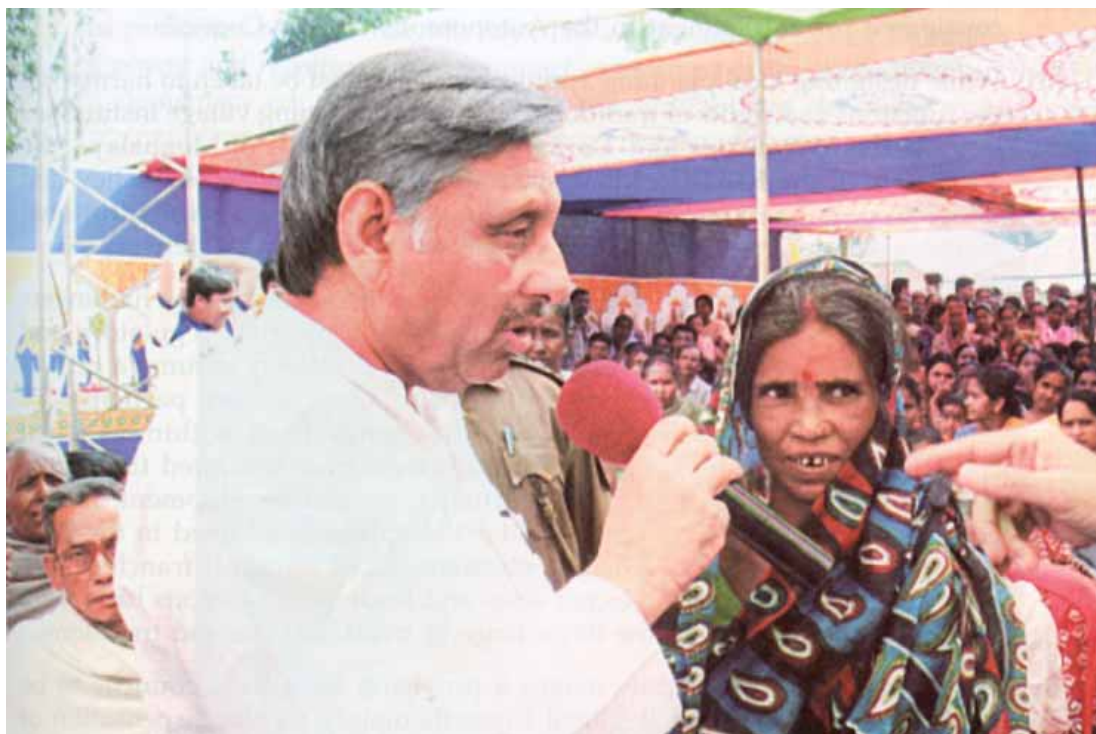
comprehensive as far as the devolution with respect each devolved function but it still to be operationalized in terms of the matching devolution of funds through Panchayat sector windows in the budgets of the respective line departments, and full deployment, as envisaged in the activity map, of officials to the appropriate tier of the system. Tripura's activity mapping is operational but needs fine-tuning. Manipur has sound legislative and even administrative provisions but scientific mapping could lead to more effective devolution and, therefore, more effective and far-reaching empowerment. In Arunachal, the activity map is ready but will not get operationalized until it is backed by the required government orders which have been left to each department to issue. This needs to be done with deliberate speed and coordinated at the highest levels of Government for till this is done, devolution will remain only on paper. Equally, all five States will need to clearly identify those budgetary line items that ought to go to the Panchayats and separately earmark them through a Panchayat sector window in the budgets of the relevant State line departments to ensure the flow of funds for undertaking devolved activities to the Panchayats. Functionaries will need to be devolved to that level of the Panchayati Raj system to which any given activity has been assigned in the activity map, in conformity with the pattern of devolution of functions and finances. All these are works in progress and the progress recorded in the last few years has been encouraging. The stage is, therefore, well and truly set for inclusive growth through inclusive governance provided this is prioritized and followed through assiduously and conscientiously.

**2.3.3** Institutionalizing participative planning from the grassroots level upwards to culminate in the preparation of a district plan is another key step in the strengthening of Panchayats. As mandated in the Constitution, District Planning Committees (DPCs) are required to be *elected* to the extent of 80 per cent of the membership by and from amongst the elected members of the district level Panchayat (Zilla Parishad) and the Municipalities within a district. Although most States falling under Part IX of the Constitution have now constituted DPCs, Nagaland, Mizoram and Meghalaya are yet to get into this exercise. However, in Arunachal Pradesh and Tripura, some issues relating to the composition of the DPCs, owing to the special circumstances of these States, still remain to be clarified. The district plan must emerge from plans prepared by each village Panchayat intermediate Panchayat, district Panchayat, and municipality for their respective geographical areas and functional competencies. To this end, State Governments need to clearly inform Panchayats at each level (and the municipalities) of the resources likely to be available and the activities entrusted to them. DPCs are entrusted the responsibility to 'consolidate' these Panchayat/Nagar Palika plans into a draft district development plan and forward it to the State Government.

**2.3.4** The Ministry of Panchayati Raj constituted an Expert Group on Grassroots Level Planning under the chairmanship of Shri V. Ramachandran, former Chief Secretary and Vice Chairman of the Planning Board of Kerala, which set out the steps for operationalizing grassroots planning. The expert group, after a close examination of the prevailing status of the planning process and decentralization outlined six preconditions to strengthen the decentralization system and design and implementation of grassroots planning to ensure that the benefits of participatory planning accrue to the people:

- (i) A clear and unambiguous activity mapping for different levels of Panchayats based on the principle of subsidiarity. Activity mapping is the key to the effective devolution of functions to Panchayats.

- (ii) Engagement of all stakeholders, particularly of historically discriminated and marginalized sections including women, in participatory planning and implementation. This has to be done to assess the resources in the villages and towns, identifying and prioritizing the needs and requirements and monitoring and evaluation of various projects, schemes and programmes.
- (iii) Devolution of adequate funds in an untied manner. The devolution of funds should be patterned on activity mapping of each level of governance. For this, State Governments will need to undertake a detailed analysis of their annual budgets, both non-plan and plan, to separate allocations to be transferred to Panchayats in accordance with the activities devolved to them. The funds available under various schemes can be allotted to the projects selected and prioritized by the people.
- (iv) Streamlining and consolidation of schemes to ensure flexibility and a measure of autonomy. This has to be done mainly at the State and Central levels.
- (v) Assignment of significant revenue raising powers and building capacity of local governments to raise revenues from the sources assigned to them.
- (vi) Maintenance of a proper management and statistical information system to enable local governments to efficiently design and implement plans and raise resources and undertake evaluation of programmes. Based on the recommendations of the expert group, the Planning Commission issued detailed guidelines to State Governments on bottom-up planning through the Panchayats, Municipalities and DPCs in conformity with the



Union Minister of Panchayati Raj, Shri Mani Shankar Aiyar at a Panchayat Meeting in Tripura



Constitutional provisions on 25 August 2006. These guidelines have been followed for the Backward Regions Grant Fund (BRGF), which makes it clear that beyond a brief transitional period, releases from BRGF would be contingent on the receipt of district plans prepared in accordance with the provisions of the Constitution.

The concerned NER States have commenced the process of district planning through Panchayats in BRGF districts. However, steps will need to be taken to ensure that these guidelines are fully followed and district planning becomes established as a practice in all districts in NER.

## 2.4. Governance Reforms in NER Areas Exempted from Panchayati Raj

**2.4.1** All of Meghalaya and Mizoram, and large tracts of Tripura, come under the provisions of the Sixth Schedule of the Constitution. Nagaland and the hill areas of Manipur are governed by similar arrangements through State legislation. Such special arrangements are aimed at the protection of tribal areas and interests, by mandating district or regional local self-government institutions for them through Constitutional arrangements or State legislation. These institutions have been entrusted with the twin tasks of i) protecting tribal culture and customs and ii) undertaking development tasks. However, the Autonomous Developmental Councils which are supposed to establish responsive administrations and undertake development-planning functions with the maximum participation of the people are yet, like their Panchayati Raj counterparts, to fulfill their role effectively.

**2.4.2** In order to maximize people's participation in governance and to chart out a clear roadmap to involve these institutions in grassroots planning, the Ministry of Panchayati Raj appointed an expert group on planning for the Sixth Schedule Areas and those areas not covered by Parts IX and IX A of the Constitution, again under the Chairmanship of Shri V. Ramachandran. The important recommendations of the Committee with regard to strengthening decentralized governance in these areas by maximizing people's participation are:

- (i) On paper, the Autonomous Councils are vested with more powers than those given to the equivalent institution of the District Panchayats by Part IX of the Constitution. However, there are significant variations in the powers given from one Autonomous Council to another depending on the nature of the Memorandum of Settlement and negotiations that preceded the assignment of the special status under the Sixth Schedule. Thus, the Bodoland Territorial Council has much more powers than the NC Hills Autonomous District Council, even though both are in Assam. It is advisable to adopt an even approach to devolution of powers under the Sixth Schedule. As a guide, the matters enunciated in the Eleventh Schedule of the Constitution may be considered for entrustment to the Autonomous District Councils.
- (ii) While designing local planning approaches, care must be taken to harmonize the functions and rights of traditional tribal self-governing village institutions such as the *Syiemships* and *Dorbars* of the Khasi hills of Meghalaya, the *Kuki-Impi* of the Kukis in Manipur, the *Clubs* of the Manipur valley and peoples' organizations of various tribes in Nagaland, with institutional mechanisms designed for modern development and service delivery.



- (iii) The Autonomous Councils will have to be oriented to become the harbingers of economic transformation and not merely be legislative, regulatory and administrative agencies. However, in order to effectively assume a central role in local development, they will need to adopt a more participatory approach. Such a transition will need to emerge from within, as tribal communities themselves proceed to adapt their time-honoured traditional systems to the needs of inclusive participation and development. In this context, it may be desirable to consider the approach adopted in the Fifth Schedule areas, where democratic elections based on adult franchise and reservations for women in elected seats and leadership positions have been applied without reducing the importance of tribal customs and traditions.
- (iv) Para 4 of the Sixth Schedule makes a provision for village councils to be established by District or Regional Councils mainly for the dispensation of justice in disputes that involve two or more tribal persons. However, recent initiatives in communitization at the village level, aimed at harmonizing the 'village community with the traditional tribal body' have shown significant success. The most celebrated example is Nagaland's experience of communitization for effective public service delivery (see Box 2.1). Other examples include the NEC sponsored 'North Eastern Community Resource Management Project' (NERCORMP) in Assam, Manipur and Meghalaya involving the International Fund for Agricultural Development (IFAD). Such initiatives are worthy of emulation to accelerate participative village development. Examples from IFAD project have shown that unlike government schemes, the IFAD funded projects have not been afflicted by the malaise of extortion primarily because they are community-driven and because people have shown a keen sense of ownership of the projects. This clearly indicates that many systems can co-exist if the delivery mechanisms work.



Union Minister of Panchayati Raj & DONER Shri Mani Shankar Aiyar and Chief Minister Shri Nephui Rio with community leaders in Phek, Nagaland



### Box 2.1 Communitization and Resurgence of Naga Social Capital

‘Once the whole State is brought under the Communitization programme, it would be model a for the whole country to follow,’ said the President of India, Dr. A.P.J. Abdul Kalam during his visit to the Communitized Khuzama Village in Nagaland on October 26 2002. Government of Nagaland has enacted the Nagaland Communitization of Public Institutions and Service (NCPIS) Act, 2002 enlarging the scope of community participation in development and welfare programmes in areas such as education, health, power, rural water supply, rural tourism, roads, forest, sanitation and rural childcare. Earlier, since 1963, only elementary education, health service and electricity management were under the Communitization scheme. This is a partnership between the government and the people through delegation of management responsibilities to the community so that the performance of public utilities improves. The community’s responsibilities include checking attendance of staff, repair and maintenance work, purchase of books/medicines, receiving funds from the government for salaries of the staff and disbursing the same after operating the principles of ‘No Work, No Pay’. The watchwords are trust, training and transfer of power and resources. For an impact assessment of this experiment in the context of elementary education, grassroot health services and electricity management

- (v) To deepen participation at the village level, there is a need to form village councils. Where such bodies have not been set up, the Central and State Government should persuade the District or Regional Councils to set up village level bodies. Ideally, there should be a democratically chosen Village Development Committee or Board, consisting of about ten to 20 members formed at the habitation level through an open meeting of the community with adequate representation of women and youth. This provision may be made wherever the village population is more than an identified threshold (say 100) and should take into account the tribal composition of the area. This body should have the responsibility of participatory planning from the village and habitation level upwards and protection and management of natural resources. Such Village Development Committees/Boards could activate participative decentralized planning at the habitation, village or cluster level. They should also be responsible for implementing the National Rural Employment Guarantee Act linked to the overall village level plan. Defining a village in NER could pose special problems given the wide dispersal of habitations and the tendency to practice shifting cultivation. The principle adopted in Section 4 of the Panchayats (Extension to Scheduled Areas) Act 1996, which defines each tribal habitation as a Panchayat could be adopted for the constitution of Village Development Committees/ Boards in NER.
- (vi) Bodies for participative planning in urban areas will need to follow the provisions of Part IXA if not exempt from its application.
- (vii) Inclusive committees may be set up at the district level, analogous to the District Planning Committee, to consolidate the District Plan.
- (viii) Unlike in the areas under the purview of Parts IX and IXA of the Constitution, there is no compulsion to appoint the State Finance Commission (SFC) to enable the assignment and devolution of taxes, non-tax revenues and grants to village, district and regional councils the State Governments. This is a lacuna and, therefore, the States should be required to constitute such bodies. The terms of reference of these SFC-like bodies may be patterned



on the provisions of Article 243-I of the Constitution. The Union Government will have to take the necessary action to persuade States to make such arrangements.


- (ix) Despite the fact that the Sixth Schedule has declared that certain functions should be entirely transferred to District and Regional Councils, some departments have not or have only been partially transferred. Some States have persisted with retaining their parallel development and administrative machinery in council areas particularly in vital areas such as rural development, education and health. Clarity in the assignments would avoid waste of resources and improve efficiency in service delivery. It is also important to wind up the parallel institutions or merge them with the councils, with respect to assigned departments.
- (x) The success of the Autonomous District Councils fulfilling their developmental role will depend crucially on their capacity to design and implement plans. Almost all councils do not have access to planning professionals. There is also no specialized set-up within the councils for planning. This results in short-term thinking on development, leading to an ad-hoc conception of development projects without proper technical and financial considerations. Therefore, capacity development to gain expertise in planning, monitoring and evaluation is important at the council level.
- (xi) The Governors of the States concerned have a special role in the context of District and Regional Councils. Special provisions have been added to the Sixth Schedule to give discretion to the Governor on some important matters. Under Para 14 of the Sixth Schedule, a provision has been made for the Governor of the State concerned to appoint a commission to inquire into and report from time to time on the administration of autonomous districts and regions and to examine and report on any matter specified by him. The report of every such commission with the recommendations of the Governor is to be laid before the legislature of the State by the minister concerned together with an explanatory memorandum regarding the action proposed to be taken by the government of the State. Considering the fast-changing scenario in the scheduled areas, the need to ensure true autonomy in the letter and spirit of the Sixth Schedule and to ensure that development initiatives proceed smoothly, this provision of the Constitution should now be invoked. All the Governors concerned could appoint a common high level commission, to examine and report on the Autonomous Councils in these States in the light of changes that have taken place, the challenges and the demands of local development.

## 2.5 Grassroots Planning and Service Delivery in NER

**2.5.1** Improvement of service delivery by local self-governments in NER would vitally depend upon the quality of planning undertaken by these bodies. Implementation of the recommendations on grassroots planning by the expert group would help in the preparation and implementation of people-based district plans. Such guidelines would also need to cover non Panchayati Raj areas.

**2.5.2** The expert group on grassroots planning has suggested a series of sequential steps for building the district plan from the village level upwards. First, a district vision setting out the goals and outcomes for the next 10-15 years will need to be fashioned through participative processes starting from the grassroots level upwards. Each planning unit starting from the Gram Panchayat





and municipalities in areas covered by Parts IX and IX A of the Constitution (and Village Development Committees in areas covered by Schedule VI of the Constitution and similar other areas discussed above) should articulate the vision and set out the goals and outcomes in terms of human development indicators, infrastructure development and development in the productive sectors of the economy based on physical and human resources. This vision for human development would ideally cover health, education, women and child welfare, social justice and availability of minimum services. Similarly, the vision for infrastructure should be in tune with the targets under the Bharat Nirman Programme. The vision for productive sectors should take account of the natural and human resources such as agricultural production, and improvement, irrigation and water management and security. The vision built from the lowest level should be coordinated and compiled at block and district levels to draw up the district vision. Each State Government in the region should coordinate and compile the visions prepared by the districts and based on these build a vision for the State.

**2.5.3** Assessing the prevailing conditions, including the status of human, physical, social and financial resources and the available infrastructure, would proceed in parallel to the envisioning process. This would require preparing accurate and detailed databases on the available standards of public services, prevailing physical assets right from the Panchayat level, inventory of the projects undertaken in the plans, details of works that spill over from one plan to the other, the financial resources required during the plan, the provision of public services such as education and healthcare by both the public and private sector credit plan and the status of micro-finance or similar self-help systems of finance. The planning process itself should start at the level of Gram Sabhas or Ward Sabhas and in Autonomous Council areas at the level of villages or habitations. At the grassroots level, based on consultations with the people, the needs and requirements as articulated by the people can be put into a matrix following which specific grants, partly untied funds and fully untied funds can be allocated based on the prioritization done by the Panchayats or the Village Councils.

**2.5.4** The plans prepared by various Gram Panchayats/VDCs should be compiled at the block and district levels by the DPCs. Here again, the projects relevant to the activities of these bodies will have to be added to those prepared by the grassroots level. The DPCs, in addition, have to put together the plans prepared by urban local bodies. Similarly, the State Government should compile the district plans prepared by the DPCs and add their own plans relating to the activities assigned to them. The NEC should put together the plans prepared by various State Governments in the NER and also prepare investment plans relating to infrastructure and services with inter-State spillovers within the region. Thus, the centrality of Village Panchayats and Village Development Committees, as well as urban local bodies, would be made central to grassroots planning. Considerable effort will be needed to build capacity to prepare and implement plans at all levels, particularly at the village level. The use of Information and Communication Technology (ICT) will also improve the monitoring of service delivery through local Governments and introduce greater transparency in Government processes, better streamlining of procurement procedures and enable better planning and decision-making. The detailed suggestions in the report of the expert group should be taken as a guide and decentralized planning from the people upwards should be institutionalized without any further loss of time.

**2.5.5** In States like Meghalaya which were granted Sixth Schedule status when they were part of the composite State of Assam, mainly as a safeguard for the customary laws and practices of the tribal minorities, there may be merit in examining whether the ADCs should continue in

their present form, now that the State is ruled by a tribal majority. ADCs in Meghalaya have virtually no role as development agencies. They continue to function as regulatory bodies collecting royalty and taxes from forest products, minerals and markets, exercise minimal control over water bodies and regulate trade by non-tribals. The mere continuance of an institution which is virtually a stand-alone body having no linkages either with the State Government or with village-based institutions requires some new thinking. ADCs would either need to be empowered with requisite delivery mechanisms and adequate funds both of which they are lacking, along the models of a Zilla Parishad.

## 2.6 Gender Sensitive Governance: Key to Inclusive Growth

There is increasing need for local government reforms to be associated with improving service delivery through local governments. A major cross-cutting concern that merits more attention is the gender dimension of local development, in particular women's effective participation in local government, to help meet their specific needs and addressing gender inequalities. Major indicators of gender equality are exercise of rights, social control, access to decision making and a public voice to defend rights. Progress towards gender equality is slow, and this is in part due to the failure to attach money to policy commitments. Not enough attention is given to the impact of allocated resources and this serves to perpetuate gender biases, although budgets offer the potential to transform gender inequalities.

- Gender budget initiatives or gender responsive budgets are tools and processes designed to facilitate a gender analysis in the formulation of Government budgets and the allocation of resources. Gender budgets are not separate budgets for women, or for men. They are attempts to break down or disaggregate the government's mainstream budget according to its impact on women and men. The way in which national budgets are usually formulated ignores the responsibilities and capabilities of men and women. Budgets formed from a gender-neutral perspective ignore the different impacts on men and women because their roles, responsibilities and capacities are never the same. These differences are generally structured in a way that leaves women at a disadvantage by creating inequality gaps.
- Major issues relating to women and children in NER are persistently high infant, child and maternal mortality ratios. Other important concerns are the feminization of poverty and the exploitation of women in low paid, hazardous and insecure jobs in the unorganized sector. These issues require a sensitive approach which cuts across all projects/programmes and schemes. Good policy requires understanding both its impact and how it might be better designed to achieve outcomes which meet the needs of women, men, and girls and boys as well as different groups of women, men and children. There is no single approach or model of a gender sensitive budget. Evidence suggests that the economic gains of gender equality lead to increased output and better development of people's capacities.
- Lack of awareness about reproductive rights and health tie the women of NER, in particular to domestic chores and play a role in replicating poverty and nullifying development initiatives. There is a propensity to see women only as members of Self-Help Groups (SHGs), as vehicles for savings and credit. The self-help concept should cover mass-based organizations of women who are legitimately concerned about the lack of food, drudgery, housing, potable water and employment.

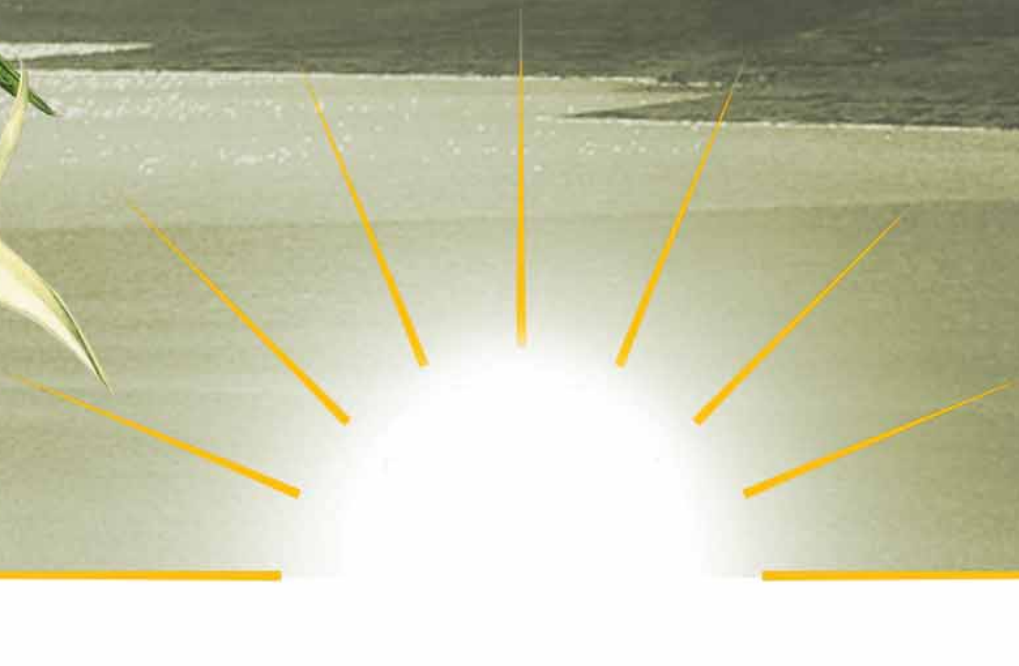


- Environmental and social impact assessments of projects are necessary during policy formulation to mitigate the gender-negative impacts of projects such as coal and uranium mining and mega dams. Women bear multiple burdens in the process of displacement as a result of large development projects and they bear greater responsibility of rehabilitating all the members of their household in the process of involuntary resettlement. It is proposed that gender outcomes be clearly enunciated at the policy formulation stage to mitigate negative impacts. Appropriate gender tools should be developed for evaluating those outcomes.
- Programmes cutting across all Ministries and Departments could clearly identify and disaggregate the group of intended stakeholders and beneficiaries in terms of gender. Gender budgeting, which involves translation of stated gender commitments into budgetary allocations and dissects the government budget to ensure its gender-differential impact, is integral to ensuring gender justice.
- To address the gender gap, it is important to launch a joint programme to ensure gender equitable local development and improved access to resources and services for women. The programme should concentrate on gender responsive planning, budgeting, implementation, monitoring and evaluation.
- Economic agencies are, with liberalization, more concerned with regulation (or de-regulation) than with implementation. In this role, it is much more difficult to have a direct effect on gender relations. It is important that an annex be produced with the last budget papers setting out some gender sensitive indicators that could be used to monitor the budget. The result of facilitating policy dialogue to include gender and macro-economic issues will lead to an improvement of economic growth and human development performance in ways that also empower women.
- Gender auditing of schemes and programmes and impact analyses inform policy makers about the need for course correction and more gender nuanced planning. Also the outcomes from gender auditing will push women's advocacy groups to ask for affirmative and corrective action by the Government. The ultimate aim is to give women a greater say at different levels and stages of developmental planning and in the formulation of policy and programmes.
- Women's economic empowerment could provide the possibility of a combination of increased productivity, less stress and better overall health. It is important to develop and implement strategies for women's participation in economic decision making through their engagement in budgetary processes. It is also important to engender economic governance processes by increasing their transparency and holding national actors accountable to their policy commitments to women.
- Gender commitments must be translated into budgetary commitments. For reprioritization in public spending we must prepare 'bottom up budgets' and work for their realization in collaboration with elected representatives. Gender economists must lift the veil of statistical invisibility of the unpaid 'care economy' managed by poor women and highlight its equality and efficiency dimension and transform macro-policies so that they become women friendly.



Chapter 3

# POVERTY ERADICATION IN THE NORTH EAST







## Chapter 3

# Poverty Eradication in North East

### 3.1. Poverty Eradication: An Overview

The concept of poverty is not restricted to economic inequality, but subsumes an inequality of opportunities, capabilities, choices and social basics. The eradication of poverty, inequality and deprivation in democratic India should invariably be addressed in a participative and holistic manner reflecting the letter and spirit of the provisions relating to “The Panchayats” and “The Municipalities” in Parts IX and IXA of the Constitution brought into force by the 83<sup>rd</sup> and 84<sup>th</sup> amendments passed by Parliament in December 1992 and gazetted in April-May 1993.

The previous Chapter on “Inclusive Growth through Inclusive Governance in NER”, set the stage through the North East’s panoply of institutions of local self-government for fostering and sustaining equitable and inclusive growth within the framework of a harmonious society. This will ensure grassroots development through grassroots democracy in a people-oriented and people-centric manner, with community supervision and people’s control over the provision of basic services and public goods. Such assured access to entitlements is the surest path to poverty eradication, especially when livelihood sustenance is married to sustained and sustainable development initiatives at the village and *mohalla* levels.

Economic development does not of itself necessarily ensure the eradication of poverty. Development has to positively impact on the augmentation of employment opportunities and the diversification of economic opportunities for the poor to secure an improvement in the distribution of income that will lead to the alleviation, reduction and eventual time-bound eradication of poverty. Moreover, in recognition of the various levels of poverty that exist, special efforts have to be made to clearly identify families living below the poverty line, especially the substantial chunk constituting the poorest of the poor and other vulnerable sections of society. This requires a technical identification of the parameters of poverty and the community’s involvement in the identification process.

Inclusive and sustainable programmes and schemes through a participative process of planning and implementation call for substantial and concerted capacity building of Panchayati Raj and other institutions of local self-government as well as effective communitization. Such capacity building, of both the elected representatives (with special emphasis on SC/ST and women) as also of administrative and technical officials, should focus on all dimensions of poverty eradication including:

- The Institutional Development Perspective;
- The Human Development Perspective; and
- The Participatory Development Perspective.

### 3.2. Poverty Issues in the North East

**3.2.1** Issues relating to poverty alleviation are of critical importance in NER, underlined by its geographic isolation from the rest of the country and large tracts in the region which are



remote, difficult to access and sparsely populated. The estimated poverty ratio in the Region, in terms of the mixed recall data 2004-05, was 14 per cent. This is lower than the country's overall poverty ratio of 22 per cent, but the general and widespread view in the North East, both among governments and the people is that the measure grossly underestimates the true extent of poverty in the region and, moreover, extrapolates limited data on to states and areas that have not been properly surveyed or have not been surveyed at all. It is also widely believed, in academic and popular circles, that wide inter- and intra-state variations in the socio-economic conditions have not been adequately taken into account. Further, the adoption of one poverty line (rural and urban) for all NER states needs re-examination. The lower value for the urban poverty line as compared to the rural poverty line is not consistent with ground realities. There are also significant variations in the cost of living in different states that have not been adequately taken into account in determining levels of poverty. The need for a thorough and comprehensive study of the profile of poverty in the North East is emphasized to lay the ground for an effective time-bound strategy of eradicating poverty. Such a survey must capture the multiple deprivations of the people including the facets of:

- (i) Economic Poverty (EP);
- (ii) Nutritional Poverty (NP);
- (iii) Human Poverty (HP); and
- (iv) Basic Amenities Poverty (BAP)

which are inter-related but distinct, with the conviction that an in-depth analysis of these dimensions can alone help in understanding the living conditions of the poor.

**Economic Poverty** (EP) of the region, as per the estimates of the Planning Commission,



Minister Aiyar with villagers in southern Mizoram

is 19.1 per cent, as against 28.5 per cent in the country as a whole, and is being reduced at a faster rate in NER as compared to the all-India average. Poverty appears to be largely rural in nature and heavily concentrated in Assam and Tripura. The composition of the poor shows that the self-employed in agriculture constitute the bulk of the poor, followed by the self-employed in non-agricultural occupations, labourers in rural areas and self-employed and casual labour in urban areas. The participation of the poor in the processes of planning is low and only some of the poor are organized in groups such as Self-Help Groups (SHGs). Local self-governments need to be empowered to address issues of poverty eradication. Relatively high per capita GDP levels (at constant prices) in five of the eight states suggests that the prospects of reducing and eventually eradicating economic poverty are promising provided economic growth rates are high and inclusive.

**Human Poverty (HP):** This is related to access to human resources. The human poverty level is high and rural–urban and gender disparities are considerable. While the literacy rate is high, skill development is low. In consequence, most of the poor lack skills and good educational standards. And as about 40 per cent of them are young (15 – 35 years), the problem of youth unemployment is perhaps the most serious and disturbing of the social and economic problems of the region, accounting, in turn, for serious political and law and order problems in many parts of NER. The participation of women in agriculture is higher than men but productivity is low. Productivity in the handloom and handicraft sectors is also low. For economic development, both knowledge and skill are of equal importance. This necessitates the strongest possible emphasis on, and priority to, the upgradation of the quality of human resources.

**Nutritional Poverty (NP)** in NER as a whole is considerable and can be addressed by increasing the purchasing power (with emphasis on economic growth and equity), imparting nutrition education and effectively implementing supplementary nutrition programmes for children and pregnant and lactating mothers. Above all, it is most disturbing that there are serious deficiencies in the PDS systems. The shortage of institutional arrangements for effective interventions to tackle nutritional poverty can best be made up by deeply involving the village community through Gram Sabhas and Panchayati Raj Institutions (and equivalent bodies in exempted areas) in all matters relating to the alleviation, reduction and eradication of nutritional poverty.

**Basic Amenities Poverty (BAP):** This relates to having access to proper houses, sanitation, safe drinking water, electricity etc. Access to basic requirements is very important for any improvement in the quality of life. In the ultimate analysis, it is only by involving local self-government institutions and local communities in service delivery programmes aimed at tackling BAP that substantially enhanced funding for such programmes can palpably impact on people's access to basic amenities.

### 3.3. Perspectives for Poverty Eradication

There are multiple deprivations associated with poverty and in order to address them effectively, there is a need for giving special focus and attention in the NE region, both at policy and implementation levels, so that absolute poverty and basic deprivation are first alleviated, and eventually eradicated, within a time-bound framework of action. A five-fold programme of development perspectives for the eradication of poverty includes:





1. Economic Development Perspectives (EDP)
2. Institutional Development Perspectives (IDP)
3. Participatory Development Perspectives (PDP)
4. Human Resource Development Perspectives (HRDP)
5. Infrastructure Development Perspectives (Infr. DP)

### 3.3.1 Economic Development Perspectives (EDP)

EDP envisages the optimal use of resources and inclusive/participatory growth. Under this rubric, *agriculture* development, based on different soil–water–forest conditions in different regions (high and low altitude hilly areas, chronically and occasionally flood-affected plains and flood-free zones) constitutes the major subset of the overall development perspective. While the short-term development strategy deals with the issue of viability and stability of agriculture and related sectors, profitability and sustainability of economic activities are concerns of a long-term strategy. The envisaged rural diversification initially supplements incomes from subsistence agriculture and gradually modernizes agriculture even while preserving the ecological balance. Rural prosperity facilitates the eradication of abject poverty and nutritional insecurity and in the process reduces the share of agriculture in the net domestic product at the aggregate and household levels.

Some of the key areas identified include the following.

#### **Agriculture and Allied Activities:**

**Agriculture:** The priority sector must be agriculture for with the region's high dependence on agriculture and allied activities, comprising over 80 per cent of its GDP it is only through a Green Revolution that the back of the region's poverty can be broken and the people as a whole placed on the parabola of progress. Such a Green Revolution must comprise the following essential elements:

- Rapid replacement of traditional cropping patterns by short-duration, high-yielding varieties of paddy in the kharif season followed by wheat, maize, mustard or vegetables in the rabi season along with soil nutrients like lime and the judicious use of pesticides, to dramatically augment agriculture productivity.
- Widespread promotion of horticulture and floriculture, as well as medicinal and aromatic plants and herbs including organic farming, to capture highly remunerative niche markets abroad.
- Plantations, especially for bamboo, rubber, spices and fruit and the rejuvenation of tea gardens, especially through small farmers and farmers' groups.
- Forestry and conservation to ensure the premier position of the North East in forest cover, bio-diversity, genetic wealth, and wild life.
- The progressive phasing out of the practice of *jhum* but only after guaranteeing alternative, remunerative local means of livelihood to the tribal communities concerned.





Minister Aiyar interacting with villagers of Tuithumhnar, Mizoram

- Determined promotion of all forms of animal husbandry, fisheries, dairying and bird life (the decline in all of which has substantially contributed to low nutritional standards in the North East).

**Increased Productivity:** It is critical to promote increased productivity and diversification of crops to monetize all sections of the economy and generate surpluses. This calls for the injection of investment in rural areas on a much augmented scale. It also calls for bringing under the plough vast tracts of vacant land lying largely unused. Double cropping in Assam has yielded very encouraging results and this should be replicated in the other states. Allied activities such as poultry, piggery and dairying need encouragement. For all these programmes, a cluster approach for increasing productivity would be very important.

Special attention is required for securing increases in the productivity of tiny land holdings of marginal and small farmers as most of the poor are concentrated among the self-employed in agriculture. This holds the key to self-sufficiency followed by surplus production. This may lead to increased :

- Cereal production through field crop agriculture production–
  - Cultivation of short duration HYV crops leaving paddy fields free for rabi crops by October in flood-free plains valleys, and the application of an advance package of practices with limited slake lime treatment for removing soil acidity.
  - HYV *Bao* paddy cultivation in flood low-lying / flood prone areas.
  - Cultivation of *Abu* (summer) and *Boro* paddy in the flood prone areas.
  - Production of HYV seeds locally.



- Horticulture Production of –
  - Cultivation of pineapple, banana, orange, passion fruit, ginger, chili, turmeric, large cardamom and vegetables.
  - Promotion of cash and horticultural crops, using forest as the basis, in all shifting cultivation areas.
  - Promotion of cluster-based floriculture.
- Sericulture production –
  - Promotion of integrated plantation and rearing of *Eri*.
  - Promotion of indoor *Muga* culture.
- Protein production
  - Animal protein: Milk, meat, egg and fish through clusters.
  - Others: Mushroom and bamboo shoots.
- Production of non-conventional items (endemic and high value)
  - Promotion of production of medicinal and aromatic plants.
  - Development of area-specific minor forest products.
  - Promotion of bamboo and cane production.
  - Development of area-specific ornamental fish culture.
  - Floriculture.



As with investment in industry and infrastructure which is governed by the North East Industrial and Investment Promotion Policy 2008, the rural sector requires a *North East Agriculture and Allied Activities Development and Export Promotion Policy*.

**Modernizing Agriculture:** The North Eastern Region has a work force of 41.6 per cent cultivators and 13 per cent agricultural labourers who depend on the land for their subsistence. The primary sector of the economy is agriculture and hence the aim should be achieving self-sufficiency in foodgrains. Horticulture, plantations and allied activities have to grow in strength with every passing year. Agri and forest-based industries and cottage and small-scale industries draw sustenance from a vibrant primary sector economy and, in their trail, open windows for gainful employment to substantial segments of the rural population. What is needed is to modernize agriculture, practice mechanized farming, promote hybrid varieties of seeds and foster minor irrigation to make the transition to high-value agriculture as also to move from subsistence farming to cash crop farming. The formation of a federated body of marketing units at the field level should also be done.

**Market Development and Monetization of the Rural Economy:** Enhancement of yields and output in agriculture and allied activities would need to be complemented by market development and monetization of the rural economy, calling for integrated attention to:

- Agricultural extension, including mobilizing the Panchayats and other institutions of local self-government for this purpose
- Land reforms.
- Rural credit and banking: One of the stumbling blocks in the eradication of poverty is the low performing micro-credit mechanism, which records a 31 per cent CD ratio. Banks, which were supposed to provide affordable credit to the disadvantaged segments on a priority basis are proving to be risk-shy in practice on account of unwarranted perceptions of credit unworthiness. Most of the intended beneficiaries are unable to provide collateral security for loans from the banks. This has crippled socio-economic development in the region. An effective credit guarantee scheme is required to cover crop loans and term loans given by banks to farmers, artisans and small businessse. Such guarantees will motivate banks and financial institutions to give loans and advances to poor people who have no collateral security to offer. This step will substantially boost investment in agriculture and allied activities as well as handlooms and handicrafts and thus give a much-needed fillip to on-farm and non-farm rural employment and income generation, thus facilitating the subsequent growth of the secondary and tertiary sectors of the rural economy.
- Agricultural link roads to reach farm output to markets.
- Cold chain links and cold storages.
- Export and fiscal incentives.
- Non-farm rural employment and income generation, especially handlooms, handicrafts and animal husbandry.

**Secondary Sector:** The accelerated development of the secondary sector, comprising the



following elements, is a necessary adjunct to tackling rural poverty through the development of agriculture and allied activities in the primary sector:

- Post-harvest processing and value addition
- Fruits (pineapple, banana, orange and passion fruit)
- Spices (ginger, chilli, turmeric and large cardamom)
- Vegetables
- Rural artisan- handicrafts (tools, design and finishing)
- Handloom, weaving (improved looms, product diversification, design and finishing)
- Quality & branding - “Regional Identity”

#### **Business & Services Sector**

- Tourism, particularly eco-tourism: Tourism has tremendous potential in the region. The promotion of tourism calls for widespread augmentation of infrastructure for the hospitality industry (always moderated by ecological and environmental considerations), skill up-gradation in hotel management and in the skills of officials promoting tourism, and a thrust on domestic tourists and low budget hospitality services. Tourism may be constructed around four concentric circles:
  - (a) state based i.e., intra-state tourism;
  - (b) multi-state tourism circuits;
  - (c) pan-regional tourism within NER and other regions of the country, particularly the eastern region; and
  - (d) international tourism with connectivity with neighbouring foreign countries.
- Repair and maintenance-based services
- Marketing/business enterprises:
- Banking and insurance
- Human resource-based employment opportunities to avail of opportunities both within NER and outside
- ICT

### **3.3.2 Institutional Development Perspectives (IDP)**

Economic development in NER is seriously hampered by inadequate institutional infrastructure to address issues of development in a concerted manner. It is essential to focus on creating and strengthening institutions that cater to the poor for enlarging the availability of social capital and making delivery and support systems effective and accountable to the community. The poor need to be organized for collective action and federations of producers’ organizations have to



be enabled to negotiate with the market and demand services from government agencies. R&D and extension agencies, input suppliers including credit delivery agencies, PDS, marketing organizations, local bodies/government etc., have to be revamped, restructured and enabled with the requisite capabilities to compete and excel in their performance. Training and capacity-building for institutions of local self-government assume special importance for ensuring the success of the devolution of functions, funds and functionaries. These institutional building efforts in conjunction with HDP initiatives would facilitate the strengthening of social capital of the poor and create conditions for the emergence of a responsive and effective delivery system. Key areas that require immediate attention include:

- Land
  - Reforms, distribution, updating of land records (computerization)  
Codification of customary land tenure system and recognition
  - Use of forest land.
- Forests
  - Enactment of farmer-friendly forest legislation (liberalization of legal aspects encouraging community participation). Tribals have traditionally been forest dwellers and forests have always been the source of their livelihood. The maintenance and growth of forests is, therefore, of prime importance to the region. Joint forest management should be encouraged for tribal communities dwelling in the forest so that they protect the forest while extracting minor forest produce for their livelihood. Any disconnect between the forest department and the tribals will neither help in preserving the forest coverage nor protect the livelihood activities of the tribals depending on the forest.
- State policy for SHG and activity-based cluster development.
- Access to formal credit, increased KCC coverage, linkages with insurance companies.
- Actions for improvement of PDS and other delivery of services.
- Improvement of micro-finance in terms of quantum and coverage.
- Research and Development on –
  - Disease control of *Muga*, HYV paddy for low-lying water-logged areas, value addition through post-harvest processing and management in agriculture.
  - Product diversification of handlooms and handicrafts, design and quality improvement. Improvement of looms/toolkits and Computer aided designs (CAD).
- Participation in trade fairs, exhibitions.
- Communitization of public facilities and services.
- Involvement of traditional institutions.





### 3.3.3 Participatory Development Perspectives (PDP)

Massive investment and outlays in plans and projects have not adequately reached the grassroots level. The delivery does not measure up to the outlay and developmental schemes do not trickle down to, nor reach the target groups. Outcomes, with which people are concerned, have to match with outlays. It is, therefore, necessary to bridge the gap between expectations and performance by mobilizing social energies, forging and fostering creative and collaborative partnerships with civil society, target groups, stakeholders and grassroots institutions to induct people into the planning and implementation process in a participatory mode. Fortunately, most of the indigenous communities in the North East exhibit substantial social cohesion and the communities are willing to work in teams and groups. These social dynamics can and must be harnessed to accelerate the socio-economic development of the region.

Poverty eradication, therefore, calls for:

- Social/community mobilization – This envisages making the poor and the community at large aware of development programmes, organizing the poor to act in groups and nurturing group action. Therefore, social and community mobilization needs to be made mandatory both at the policy and implementation levels for all Poverty Alleviation Programmes (PAPs), backed by adequate funds and functionaries.
- Digital Information System (DIS) – To assist decision making processes in programmes for the poor, there is need for a Decision Support System (DSS) to bench-mark natural and bio-resources and their use; secure connectivity and infrastructure; establish required public and private institutions; improve service delivery and; undertake action research and analysis.
- Management Information System (MIS) – to assist programme implementation and monitoring effectively.
- Planning for development – Planning for socio-economic development should fully take into account differentiated local realities and local potentialities, local geo-physical features, local resource endowments and local core competencies. The planning profile must respond to different situations, conditions and felt needs of the people and be integrated into holistic regional planning. Participatory planning may be facilitated by DSS to make collective decisions that suit the people better based on the local realities and wisdom. Participatory planning and implementation should be made mandatory for all poverty eradication programmes.

### 3.3.4 Infrastructure Development Perspectives (Infr. DP)

If inclusive growth calls for attention to inclusive governance and rural development, the single biggest constraint on accelerated growth is poor infrastructure affecting:

- Road connectivity
- Rail connectivity

- Air connectivity
- Cyber and telecom connectivity
- Inland waterways
- Power

This lays emphasis on the development of necessary socio-economic infrastructure for providing backward and forward linkages for production, value addition/processing and marketing of rural products thereby integrating the rural community with the rest of society. This, while facilitating the process of modernization of production sectors, would also pave the way for the promotion of a rural-urban continuum. The aspects to be covered include:

- District headquarters/towns should be improved making them as growth centres. The block headquarters should be made as rural business hubs.
- Connectivity improvement
  - Rural roads (all weather and agriculture road)
- Storage and others
  - Warehousing, godown, cold chain etc.
  - Seed bank, raw material / yarn bank.
- Irrigation and Power
  - Power (micro, mini )
  - Irrigation (Small and micro), flood control, soil and water conservation works and drainage systems to prevent water logging, are directly associated with the spread of the Green Revolution. Water harvesting, especially in hill areas, is of crucial importance. Floods cause havoc, wiping out most of the gains of economic development virtually on an annual basis. Massive investment, accompanied by imaginative technical innovation in irrigation and flood control, must be integral to the spread of the Green Revolution.
- Basic Amenities
  - Provisions of minimum nutrition, literacy, clean drinking water, reasonably good infrastructure and medical coverage is a prerequisite for promoting meaningful socio-economic transformation in the region. An economic superstructure can be built only on a sound social and physical infrastructure guaranteeing food security, universal education, health coverage and basic amenities. The state and civil society have to ensure the basic minimum needs of the people. A safe drinking water supply system, sanitation, electricity and schools in line with the Nagaland model of communitized for sustainability.



- Market and Production
  - Common facility centres: These can help traditional artisans and craftsmen of the region who possess a profound fund of talent, by providing them vocational training and easy access to modern designs preferred by the customers. Their skills need to be honed and upgraded. They need marketing techniques, market outlets and supply agencies which can procure raw materials for them at cheaper rates and can fetch good prices for their finished products neutralizing middlemen in the sale of their products. It may be mentioned here that Self-Help Groups in Coimbatore in Tamil Nadu have organized a district supply and marketing agency on the lines of DRDA and have set up a shopping centre in the heart of the town which caters to the needs of hundreds of low income people in the city. In the process they have generated and accelerated income for SHGs. Similar attempts can be made in the North Eastern states.
- Self-Help Groups (SHGs): Users associations and NGO change agents in different socio-economic–human resource sectors can be co-opted for securing creative and supportive energies and turned into catalysts for an economic breakthrough for the impoverished people of the North Eastern Region.
  - Development of a rural marketing platform in large market places.
  - Establishment of a regional Organic Farming Certification Agency (OFCA) in Guwahati to begin with.
- Capacity building facilities
  - Establishment of farmers’ school at block level to act as change agents.
  - Block Level Resource Centre (BLRC).
- Private Sector:
  - While the North East States can undertake determined efforts to augment domestic absorptive capacity, it would be essential to bring in the private sector from the rest of the country, as well as foreign direct investment, equipment, management and technical expertise to exponentially increase the absorptive capacity to take in the financial resources available for building infrastructure in the North East. It would also be critical to inclusive growth to ensure that the first beneficiaries of infrastructure development, especially with regard to power and road connectivity, are the people of the North East in their far-flung villages and towns.

### 3.3.5 Human Development Perspectives (HDP)

The development of human resources and basic services is of prime importance. At present, the quality of education in the region as a whole is woefully sub-standard. There is a serious shortage of trained teachers and infrastructure in educational institutions. Higher education lacks centres of excellence. In consequence, high literacy rates in the region are yet to be converted into knowledge or economic endowment.

HDP calls for the augmentation of human capital to absorb people productively into gainful economic opportunities and enabling all people to lead decent lives with human dignity as well as health and nutritional security. The human development initiatives pave the way for empowerment, enabling the people in general and the poor in particular to access the development process. Building awareness and capability up-gradation should be a continuous process and should be compatible with the needs of the market. HDP envisages attention to the following aspects:

1. Awareness creation for enhancement of knowledge about the various programmes at the local level.
2. Dissemination of Community Based Disaster Management (CBDM) skills.
3. Social/community mobilization helping people to act in groups for the planning and implementation of all programmes.
4. Upgradation of skills of poor farmers (men and women) in the areas of –
  - (i) Attitudinal changes to switch from a subsistence mindset towards commercialization,
  - (ii) Techno-managerial skills to enhance the productivity of agriculture and allied activities, and
  - (iii) Techno-managerial skills to enhance production of non-conventional land based items like aromatic and medicinal plants, cane and bamboo cultivation, ornamental fish culture, minor forest products; and skill development for organic farming practices.
5. Upgradation of the techno-managerial skill of poor rural artisans and handloom weavers in the areas of –
  - (i) Improved tool kits/looms,
  - (ii) Product diversification,
  - (iii) Design and finish, and
  - (iv) Packaging.
6. Development of entrepreneurial skills particularly among the educated unemployed youth both men and women, in the areas of –
  - (i) Marketing and business,
  - (ii) Repair and maintenance,
  - (iii) Banking and insurance, and
  - (iv) Tourism.
7. Exposure visit both at the national and international levels.
8. Development of market oriented skills in ITI and other technical institutes that are in demand in the present day market.

Another area which requires emphasis is capacity building for value addition. Employment oriented training programmes are being taken up but the emphasis should be on creation of opportunities for self-employment. Promotion of handloom and handicrafts should be addressed and border trade should be encouraged. What is imperative is imparting employable skills, vocational training, toning up standard of education from the micro to macro level and promoting skills, knowledge acquisition and upgradation and capacity building for job absorption, employability and entrepreneurship.

### 3.4. Plan of Action

To take active part in the five development perspectives for poverty eradication, the initiative and efforts that are required to create an encouraging environment by the government at the national, state and regional levels for participation of the poor have also been envisaged. As a part of such an initiative, the actions/roles at different levels are:

#### **Government of India**

1. Generation of state-specific poverty data.
2. Provision for adequate resource support.
3. Providing funds in a transparent and equitable manner.

#### **North Eastern Council**

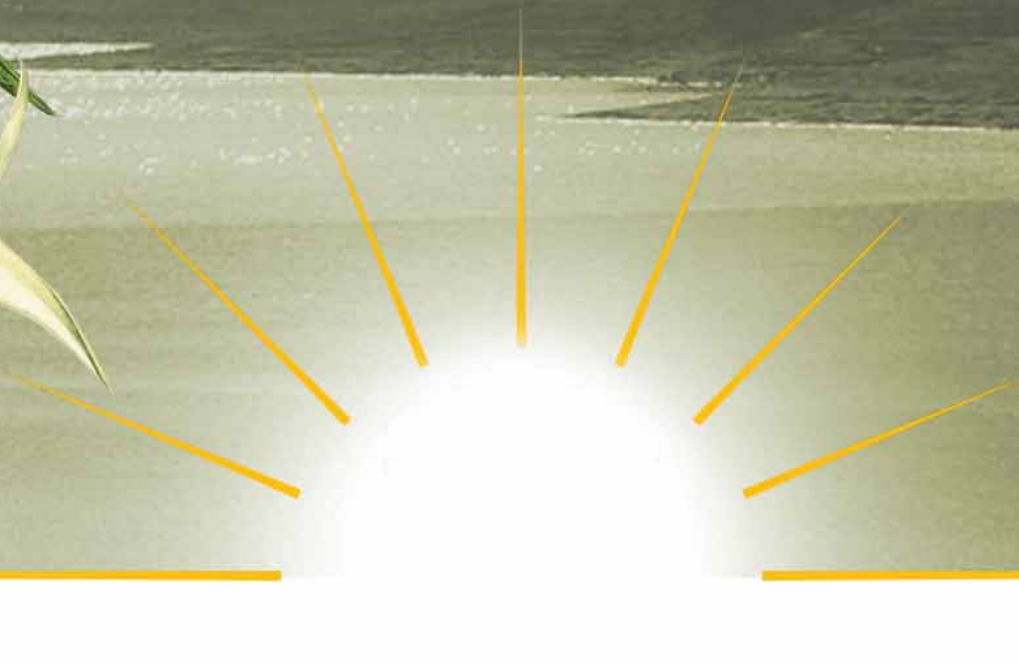
1. Regional planning and development of regional infrastructure.
2. Intra-regional cooperation.
3. Adequate resources.

#### **State Governments**

1. State policy on decentralization.
2. Empowerment of PRIs /other LS Government and urban bodies.
3. State policy for the promotion of the SHG movement, activity based cluster development and forest policy encouraging community participation.
4. Revamping of the functioning of the public distribution system including social security.
5. Land -
  - Reforms, distribution, updating of land records and their computerization.
  - Codification of customary land tenure system and recognition.
  - Laws related to use of forest
6. Heavy concentration on agriculture extension programmes.



**CHAPTER 4**  
**THE RURAL SECTOR:**  
**BASIC CROPS, CASH CROPS,**  
**RURAL DEVELOPMENT,**  
**NON-FARM RURAL EMPLOYMENT,**  
**IRRIGATION AND FLOOD CONTROL**





## Chapter 4

# The Rural Sector: Basic Crops, Cash Crops, Rural Development, Non-Farm Rural Employment, Irrigation and Flood Control

The development of the rural economy is central to the development of the North Eastern Region for two main reasons: first, over 80 per cent of the population of the region lives in rural areas and its livelihood depends on spreading economic activities in rural areas. Second, the region is rich in natural resources and harnessing these for the benefit of the population would require strengthening forward and backward linkages. The rural economy, therefore, needs to be given a big boost in envisioning a meaningful agenda for rapid economic development for enduring peace and prosperity in the region.

Development of rural economies in the region will rest on the following main activities: agriculture, forestry, livestock, minerals and rural non-farm activity. The region has vast potential for increasing primary sector output: the wide diversity in topography and geo-climatic conditions across the region offer scope for cultivation of a variety of agricultural crops and for horticulture and floriculture; it hosts 38 per cent of the country's river waters which provide enormous scope for irrigation, fishery and maintenance of livestock; its rich deposits of hydrocarbon (oil and gas) provide huge potential for mineral extraction and; its vast areas of dense forests offers rich biodiversity, medicinal plants and other valuable forest resources most of which are still unexplored. The torrential Brahmaputra and Barak rivers and their tributaries deposit their rich alluvial silt along the banks of the plains of Assam making the soil very fertile.

### 4.1 The Agricultural Sector

Agriculture is the mainstay of the economies of the northeast. This sector accounted for close to 30 per cent of the region's NSDP in 2002-03, and is a major source of employment and livelihood for around 80 per cent of the population. However, agricultural growth has been uneven across regions and crops. NER continues to be a net importer of foodgrains. In spite of covering 8.8 per cent of the country's total geographical area, NER produces only 1.5 per cent of the country's total foodgrain production.

A people-based strategy will be aimed at increasing agricultural productivity, which will boost rural incomes and enable a shift of workers from agriculture to other activities, mainly in the manufacturing sector, which will provide most of the employment opportunities being created in the region.

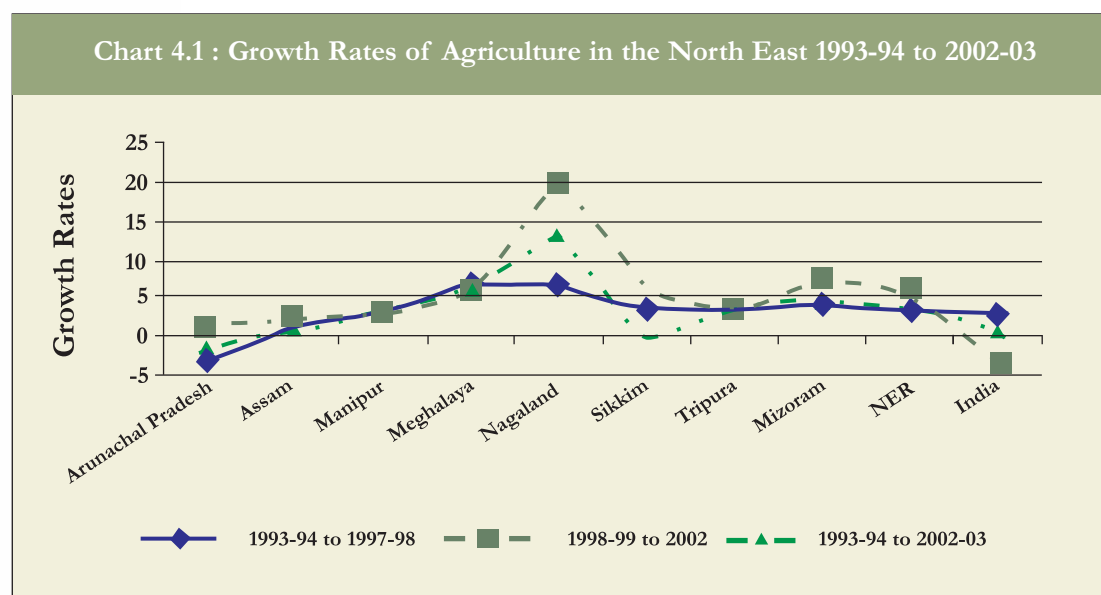
This will be done by focusing on areas, activities and sectors in which the NER as well as each State in it has a comparative advantage. The analysis that follows shows how the pattern and trends in agricultural production in the region have important implications for a development strategy. The similarities in production and demand patterns across States are a reflection of the fact that every State produces almost all products though in varying proportions. Despite these similarities, each State has specific productivity advantages possibly conditioned by difference in their natural environment. However, a lack of trading opportunities has prevented the North Eastern States from specializing in producing those items in which they have a comparative advantage. Instead the goods they produce depend on the demand emanating from within each State. Employment opportunities are, therefore, limited by the extent of the local market.



The relatively small size of almost all the NER States indicates that none of them have the resources to concentrate in all areas of production. Hence, the strategy for agriculture will identify products in which NER States should specialize in the short run; it will also indicate areas that need to be focused on from a 20 year perspective.

## 4.2 The Performance of Agriculture in the Region

Agriculture accounts for a major share of the economies of all the North Eastern States, from 47 per cent in Arunachal Pradesh to 26 per cent in Nagaland in 1993-94 (Table 4.1A, Annexure 4.1). However, the share of agriculture has been declining in all the States (except Nagaland), indicating that these States have undergone significant structural changes. With the exception of Meghalaya, the share of manufacturing in general has been falling, accompanied by an increasing share of services.



Source: Central Statistical Organisation, Various Years

While agriculture in NER grew at a much higher rate (3.8 per cent) than the average for the country (0.6 per cent) between 1993-94 and 2002-03 (Chart 4.1; Table 4.2A in Annexure 4.1) growth rates differ among different States of the region: Arunachal, Sikkim and Mizoram show negative growth while growth performances of Nagaland, Manipur, Meghalaya and Tripura are impressive. Only Assam's growth rate, though slightly higher than the Indian average, is far below the NER average. Nagaland's exemplary growth rate of 13 per cent can perhaps be ascribed to remarkable dynamism based on policy initiatives taken by the Government and possibly technology upgradation and its adaptation by farmers.

## 4.3 The Hills and the Plains

The NER can be broadly divided into three geographical regions: the Surama Valley, North Eastern Hill Basin and the Brahmaputra Valley. The hills and the plain regions differ significantly in terms of the availability of water, population density, habitation patterns, climatic conditions, soil quality and forestry and biodiversity. Variations in characteristics and natural endowments determine the nature of primary activities that can flourish with differential comparative advantages in the

different States of the region. The availability of large water bodies in the plains of the Surama Valley and the Brahmaputra Valley of Assam makes them suitable for agriculture and plantation crops as well as for promoting pisciculture and fisheries. On the other hand, the low percentage of cultivable land and sparse population in the hill States limits the choices for land-based activities in the hills. The lack of rivers to irrigate the land and the difficulties of storing water due to hill slopes, have compelled farmers to depend mostly on *jhum* cultivation. Herein lies the importance of water retention projects in the hills in order to move away from traditional *jhumming* to modern technology-based farming such as horticulture and floriculture.

Of course, the relative abundance of pasture land in Sikkim (10 per cent) makes it an ideal place for rearing cattle, poultry and other live stock.

In general, the NE region has a strong advantage in forest-based activities and biodiversity, given its very high percentage of forest land (52 per cent) compared to the Indian average of 23 per cent (Table 4.1).

**Table 4.1: Comparative Natural Resource of NER, 2000-01**

Percent

STATES	Forest/ land	Net area sown / land	Area sown more than once/ net area sown	Net area sown / total cropped area	Area sown more than once / total cropped area	Permanent pastures & other grazing lands/ land	Land under misc. trees & groves not included in net area sown /land	Cultivable waste land / land	Fallow lands other than current fallows /land	Current fallows /land
Arunachal Pradesh	94.0	3.0	60.0	62.0	38.0	0.1	0.8	0.8	0.9	0.5
Assam	25.0	35.0	49.0	68.0	33.0	2.1	3.0	1.0	0.8	1.4
Manipur	28.0	6.0	49.0	68.0	33.0	-	1.1	-	-	-
Meghalaya	43.0	10.0	20.0	83.0	18.0	-	8.0	19.8	8.3	2.9
Mizoram	88.0	4.0	-	100.0	-	1.1	1.5	6.0	8.4	1.8
Nagaland	54.0	19.0	5.0	96.0	4.0	-	8.9	4.1	5.0	5.8
Sikkim	36.0	13.0	33.0	85.0	25.0	9.8	0.8	0.1	1.3	0.6
Tripura	58.0	28.0	53.0	65.0	35.0	-	2.6	0.1	0.1	0.1
North East	52.0	18.0	43.0	80.0	30.0	1.1	2.8	3.2	2.2	1.4
<b>India</b>	23.0	46.0	33.0	85.0	25.0	3.6	1.1	4.5	3.3	4.8

Source: *Statistical Abstracts of India 2003-04*.

Note: Figures are fractions of total available land unless otherwise specified.

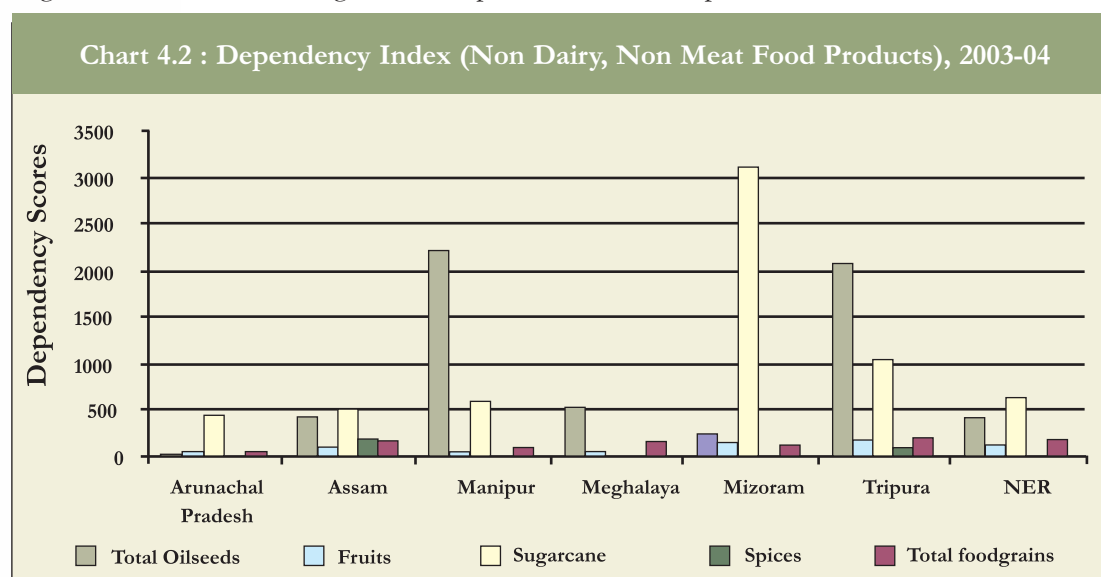
## 4.4 Crop Cultivation: from Self-sufficiency to Specialization and Trade

The diverse geo-climatic conditions in the northeast make it an ideal location for the cultivation of a variety of agricultural crops. These products are mainly produced for local markets, and mostly in the form of primary produce without significant value addition. Agricultural systems remain predominantly traditional. The land-to-person ratio for the NE region (0.68 hectares/person) is much higher than the national average (0.32 hectares/person), with Arunachal Pradesh having



the highest ratio (8.63 hectares/person) and Assam the lowest (0.29 hectares/person). The pattern of agricultural growth has remained uneven across regions and crops. NER continues to be a net importer of foodgrains as despite covering 8.8 per cent of the country's total geographical area, it produces only 1.5 per cent of the country's total foodgrain production. All the reports (specially commissioned studies for NER, like the Shukla Commission Report, and the L. C. Jain Committee Report State Development Reports for various States and NEC Vision 2020) recognize the importance of agriculture in NER, and attribute low agricultural productivity to the low usage of HYV seeds and fertilisers, and inadequate irrigation, infrastructure and credit.

The Dependency Indices<sup>1</sup> (Chart 4.2; Table 4.3A in Annexure 4.1) indicate that NER is highly dependent on imports for almost all the commodities for which data was available, the only exception being spices.<sup>2</sup> Cardamom, black pepper, chilli, turmeric and cinnamon, considered to be 'high-value, low-volume, long-shelf-life'<sup>3</sup> products should be patronized.<sup>4</sup>



Each State has distinctive production advantages vis-à-vis the other NE States and the rest of the country, yet every State produces almost all the products it needs for internal consumption (Table 4.4A in Annexure 4.1). This suggests lack of sufficient trade both amongst the NE States as well as between the NE States and the rest of the country. This coupled with similar demand and production patterns across the NE States (most people in the region prefer rice and also produce it) have prevented crop specialization. Since each State is unable to meet the consumption demand of some products internally, this has led to high import dependency of all the States.

## 4.5 Production: Comparative Advantage of NER

This pattern of production has resulted in inefficient land utilization across the States; a more optimal allocation of land among crops would increase agricultural output and productivity

<sup>1</sup> Dependency index is the ratio of consumption share to production share. Here an attempt is made to explain whether there is any match between the crop specialized and produced with the major crop consumed.

<sup>2</sup> The Third Sectoral Summit held at Guwahati in March 2008 recommended that the Spices Board be strengthened and intensify its activities in NER to promote the production and productivity of spices, particularly of organic spices.

<sup>3</sup> See chapter on NER in the Eleventh Plan document.

<sup>4</sup> This will also result in a reduction in *jhumming* as suggested by R. Kevichusa, Kohima.

**Table 4.2: Highest Comparative Advantage for Products of NER s: Regional Specialization Index (RSI)**

State	Products
Arunachal Pradesh	Small millet, maize, ginger, pineapple
Assam	Tea, rapeseed and mustard, sugarcane
Manipur	Chillies, rice, ginger, pineapple
Meghalaya	Ginger, potatoes, sesamum, pineapple
Mizoram	Ginger, maize and sesamum
Nagaland	Small millet, maize
Sikkim	Ginger
Tripura	Natural rubber, coconut, bananas, pineapple

Source: *Statistical Abstract 2003-04* and NSSO, 2002

in the region. Significant complementarities among States in agricultural products justify the need for and the basis of trade in agricultural products within the region.

By identifying crops in which different States have a comparative advantage, resources can be concentrated and efforts made to promote their cultivation at least in the short run. Different models are used by economists to determine comparative advantages of different States in crop production.<sup>5</sup> Based on these, specialization patterns that are best suited to the different States are indicated in Table 4.2. Each State demonstrates certain production advantages: Arunachal in small millets, Assam in tea<sup>6</sup>, Meghalaya in ginger, Mizoram in ginger, Manipur in chillies, Nagaland in small millets and maize, Tripura in natural rubber<sup>7</sup> and Sikkim in maize.<sup>8</sup>

## 4.6 Constraints to Agricultural Growth

In the plain areas, small landholdings (0.63 acre per operational holding in Assam) of the region preclude mechanization of agriculture. In high altitudes, water run-off is rapid, and therefore the region lacks water for agriculture during the winter season despite having abundant rainfall in summer. Therefore, lack of irrigation facilities and absence of water-retention practices severely limit possibilities of multiple cropping resulting in low land productivity. Of course, by planting short-duration crops (so-called HYVs) which take nearly 3.5 to 4 months from sowing to harvesting, instead of the traditional crops which take nearly 5 to 6 months, it is possible to increase crop intensity without irrigation<sup>10</sup> (see box 4.1). However, these crops require large investments in fertilizers, seeds and pesticides which poor farmers (due to the small landholdings) may not be able to afford. Even if bank financing is possible to motivate small farmers to shift to the new crops,

<sup>5</sup> Specialization patterns and comparative advantages of the different states have been analysed with the help of four indices: the regional specialization index (RSI), national specialization index (NSI) in various agricultural crops, the consumption (demand) intensities for different crops and comparative advantages in various crops for each state and the country. See Annexure 4.3 for more details.

<sup>6</sup> The Sectoral Summit at Guwahati in March 2008 recommended the introduction of a transport subsidy of Rs. 1.50 per kg. for tea exported directly from ICD, Amingaon, Assam, and that more mini-factories be set up. The Tea Board will also develop a separate logo for Assam Orthodox Tea. The Summit also recommended that the Assam Government issue 'possession certificates' to small tea growers to enable them to register with the Tea Board.

<sup>7</sup> The Third Sectoral Summit held at Guwahati in March 2008 recommended that the Rubber Board fund area expansion and rejuvenation of sick plantations and introduce technology for increasing productivity; also that it address location-specific agro-management and processing issues and maintain and support nurseries run by Gram Panchayats and SHGs.

<sup>8</sup> Sikkim does not form part of this analysis, as its links are mainly with the Siliguri railhead, rather than with the other NER states.

<sup>9</sup> As suggested by Dr. I.K. Bharthakur.



farmers may not find the incentives sufficient enough to induce them to take loans due to uncertainties caused by recurring floods. Further, if rainfall turns out to be scanty, then water too becomes a key issue in shifting to the cultivation of HYVs.

In the hills, agricultural productivity is constrained not only by the paucity of water but also by the fact that land is held not by individuals but by the community as a whole. In Tripura, land reforms have been accorded high priority with the aim of providing land to the tiller.

Lack of individual ownership rights may be an important reason for the popularity of *jhum* cultivation in the hills. The soil in hill areas is highly acidic and to neutralize it, hill tribes often take recourse to burning wood and leaves to increase its alkalinity. This requires keeping the land fallow after a single harvest to allow wild grass to grow to prepare it for *jhumming*. Further, as land is common property, cultivators have no incentive to invest in it to improve its quality. Since the hills are sparsely populated and land is relatively abundant, shifting cultivation to a new location is easy.

No discussion on increasing agricultural production in the region can be complete without an in-depth discussion of the flood situation, especially in the Brahmaputra and Barak valleys, and the land covered by their tributaries. Floods and bank erosion are annual phenomena in the Brahmaputra river basin. Geomorphic and climatic conditions in the region make it vulnerable to deluges. Historically, communities inhabiting the flood plains in the Brahmaputra rice basin have coped with floods through resilient adaptive strategies, but more recently these have become complicated by a booming population and ever-increasing technocratic intervention. The great Assam earthquake of 1950 can be considered a watershed in the Brahmaputra's flood history as it elevated the bed of the river at several places, as it led to a more intense over-bank discharge during

**Table 4.2(a): Highest Comparative Advantage for Horticulture Products of NER States<sup>10</sup>**

State	Horticulture Products
Arunachal Pradesh	Chillies, citrus, apple, passion fruits, ginger
Assam	Turmeric, potatoes, bananas, pineapple
Manipur	Chillies, ginger, pineapple, brinjol, mushroom, potatoes
Meghalaya	Turmeric, Ginger, potatoes, pineapple
Mizoram	Ginger, brinjol, mushroom
Nagaland	Passion fruit, pineapple
Sikkim	Ginger, large cardamom, flowers, seasonal vegetables
Tripura	Citrus, bananas, pineapple

the monsoon of 1954-55, bringing the alarming flood situation to the attention of the Central Government. In response, in 1955 the Government drafted its first policy document related to floods in the region, which advocated a tripartite strategy to mitigate the hazard of floods. The immediate goal was to protect important towns along the south bank of the river Brahmaputra that were threatened by floods and bank erosion. Medium-term plans were creating revetments, while long-term planning was aimed at developing large structures to guard against bank failures

<sup>10</sup>The results are based on RSI, NSI and other Central Government documents (such as *Horticulture: Business Opportunities in the North East Region*, Horticulture Commissioner, Government of India, Ministry of Agriculture).



#### Box 4.1 Provision of HYV - A Case for Paddy Crop

The justification for the introduction of HYVs in paddy had been made based on the fact that the cultivation of long-duration (six months) traditional paddy varieties requires that large areas of land, roughly 25+ lakh hectares, be kept fallow annually from mid-December to mid-June. If instead, HYV paddy is sown which takes 110 to 120 days to mature, harvesting may be completed by the end of September, which allows the cultivation of numerous crops like mustard, wheat, sunflower, maize, lintels, pulses, vegetables including potatoes, tomatoes, chilies, onion and garlic in September. This increases crop intensity and does away with the need for irrigation, since the moisture content in the land during the autumn months is sufficient for cultivation. Dr. I. K. Bharthakur, a distinguished member of NEC tested the prospect of this in Tigrāi in Tinsukia District, Assam and at Balishia-Bandarmari group of villages near Tezpur during 2006-08. The paddy yield was very high to the tune of 6 to 8 tons per hectare in contrast with 1.62 tons per hectare for the traditional paddy crop.

*Source: Note from Dr. I. K. Bharthakur, Member, NEC.*

and the incursion of flood water. In the years that followed many committees made suggestions to improve the existing strategy through innovating technological interventions from flood protection to flood proofing and flood zoning. However, none of these strategies for flood were able to alleviate the misery and trauma faced by communities occupying plains (see Box 4.2).

To enhance land and labour productivity what is needed is:

- The transfer of excess labour in a family from primary farming to the tertiary sector;
- Use of short-duration crops and hence a provision for multiple-cropping;
- Use of fertilizers, provisions for irrigation and mechanization of agriculture;
- Skill upgradation of farmers;
- A shift to commercial farming such as horticulture and floriculture;
- Provision for market formation; and
- Provision for water-retention programmes.

The feasibility of these policy options is, however, doubtful because:

- (i) Short-duration crops, fertilizers and mechanized agriculture are basically capital-intensive and require large investments from farmers. Land productivity enhancement is typically not possible unless farmers are ensured returns on the investments made, which requires taking a gamble on floods.
- (ii) Mechanizing agriculture is not possible on a large scale, as the size of landholdings is small.

#### Box 4.2 : Floods in the Brahmaputra Basin: Measures Taken and New Approaches

The techno-managerial approach to flood control is a colonial legacy, with added impetus from the US 'New Deal,' that initiated big dams and water control projects in the United States. The Brahmaputra Flood Control Committee in its report highlighted the involvement of foreign consultants in the early 1950s and 1960s who advised the Central Government on appropriate measures to mitigate flood hazards. The various policy recommendations that have played a vital role in shaping the Brahmaputra flood control policy include:





**Main Recommendations fo Various Committees and Experts  
on Flood Control Measures**

Year/Committee	Recommendations/Work
1958: Bhagabati Committee on Embankment and Drainage in Assam	<ul style="list-style-type: none"> <li>Carry out annual sample surveys of the economic condition of people from different parts of the Stateto assess the impact of embankments and drainage projects.</li> <li>Prepare a comprehensive plan for flood control and the provision of sluices in future embankments.</li> </ul>
1964: Study of Erosion Problems of the Brahmaputra	<ul style="list-style-type: none"> <li>Carry out anti-erosion work in specific stretches where the problem is acute.</li> </ul>
1968: Pagladiya Enquiry Committee, Assam	<ul style="list-style-type: none"> <li>Raise and strengthen existing structures.</li> <li>Provide flood escapes at suitable locations.</li> <li>Provide adequate waterways for roads and rivers. Investigate detention dams in the upper reaches of Pagladiya.</li> </ul>
1980: Brahmaputra Flood Control Commission	(Couldnotbeobtained)
1982: Ministers' Report on Flood Control	<ul style="list-style-type: none"> <li>Special assistance to Assam.</li> <li>Finalize the proposal regarding the Dehing and Subansiri dam project in the Brahmaputra valley and Tipaimukh on the Barak and their execution for moderating floods, generating large blocks of power and arresting silt.</li> </ul>
1986: Rastriya Barh Ayogh, Government of India	<ul style="list-style-type: none"> <li>Ensure that the location and spacing of embankments are in conformity with design requirements to minimize the danger of erosion.</li> </ul>
1982: Brahmaputra Board	<ul style="list-style-type: none"> <li>Prepare a master plan for measures to manage floods and bank erosion in the Brahmaputra valley.Submit a feasibility report on the Dehing and Subansari dam project. Suggest management of major tributaries in both the valleys.</li> </ul>

Source: Compiled from *the Gazetteer of India Assam State, Vol 1, 1999* and Dhar (2002).

In the last decade the emphasis has shifted to living with floods. State-sponsored schemes to minimize the impact of floods in the six decades since Independence have been severely constrained by embankment failures, bureaucratic apathy and technocratic arrogance, that has excluded participation of the local people actually affected by the situation. Pioneering works by people like Burton, Keats, White and Mustafa in the flood plains of the United States and Pakistan reveal a very complex and heterogeneous understanding of floods by communities that live with them. Not everywhere are these communities in conflict with nature, rather they have developed resilient strategies by incorporating a cognitive interpretation of flood events.

A major shift in State policy was the creation of the Rastriya Barh Ayog in 1986 that formulated a holistic plan with both long-term and short-term solutions to issue. But the efforts to push through this plan were limited. The Brahmaputra Board emerged as a regional institution to monitor, develop and implement flood management strategies in the valleys of North East India. Since its inception in 1980 it has made several recommendations to deal with floods, but has failed to evolve a workable solution to the problems faced by the marginalized population living along whole stretch of the *chars* and *chaporis* (sand bars) so frequently affected by floods.

Source: Debojyoti Das, from his unpublished M. Phil. Dissertation *Structural Vulnerability to Flood and Bank Erosion in Majuli Island: The State Policy in Flood Mitigation in the Brahmaputra River Basin*, submitted to the Center for Studies of Science Policy, Jawaharlal Nehru University, July 2006.



## 4.7 Horticulture and Floriculture: The Next Stage in Development

Table 4.3 shows the rich variety of medicinal plant grown in NER.

**Table 4.3: North East—Treasure House of Medicinal Plants**

1	Acorus calamus	21	Litsea cubeba
2	Aristolochia tagala	22	Lycopodium clavatum
3	Artemisia nilagirica	23	Paedaria foetida
4	Cinnamomun bejolghota	24	Passiflora edults
5	Cinnamomun tomala	25	Piper longum
6	Clerodendrum colebraookianum	26	Pipernigrum
7	Clerodendrum serratum	28	Rubia cordifolia
8	Costus speciosus	28	Solanum ferox
9	Curcuma longa	29	Solanum myriacanthum /solanum khasianum
10	Dillenia pentagyma	30	Solanum nigrum
11	Dioscorea alata	31	Solanum toryum
12	Fagopyrum dibotrys	32	Swertia charayita
13	Gloriosa superba	33	Terminalta billirica
14	Gynacardia odorata	34	Terminalia chebula
15	Hedychium coronarium	35	Viburnum foetidum
16	Hedychium spicatum	36	Zanthoxylum armatum
18	Hedytis scandens	38	zanthoxylumalatum
18	Hibiscus rosa simensis	38	Withania somnifera (Linn.)Dunal
19	Holarrhena antidysenterica	39	Plantago ovata Forsk
20	Hauttuynia cordata	40	Taxusbaccata/Taxus wallichiana

The strategy for agriculture which envisions a shift in farming from subsistence to cash-crop farming will lead to the expansion of what is now a nascent horticulture sector. Since farmers are naturally risk-averse, effecting changes in their cropping patterns will not be easy, unless gains from doing so are clearly demonstrated. With funds from the Central Government Horticulture Mission, States like Mizoram, Sikkim and Meghalaya have established Centres of Excellence in Horticulture which have started spreading the idea of fruit and vegetable cultivation among farmers successfully (see Box 4.3).

### **Box 4.3 Horticulture in the North East—A Case Study from Meghalaya**

A vision for the agricultural sector depends crucially on developments in the horticulture industry of the States. This is particularly important as the States also seem to be focusing on shifting farmers from subsistence to cash crop farming. Since farmers are naturally risk averse, it is not easy to get them to change their cropping pattern unless gains from doing so are clearly demonstrated. Funded by the Horticulture Mission of the Central Government States like Mizoram, Sikkim and Meghalaya have established Centres of Excellence in their districts. In





Floriculture in the North East



North East Orchids



Mizoram and Meghalaya, these centres act as an interface between the private buyer of flowers, Zopar, and the farmer. The Centre for Excellence in the Shillong district of Meghalaya was visited by one of the field trip teams.

The centre is looking at the whole gamut of production of flowers (anthurium), fruits (strawberries) and vegetables (example, cucumbers). The first step is to provide seeds (or flower pods) to farmers. In the case of anthurium the range of operations performed by the centre is enormous. First, Zopar provides flower pods obtained from Holland to farmers. This is to avoid problems of patent violation and also because the Dutch plants are more resistant to pests. Local varieties are also developed for the national market. Second, special fabricated greenhouses are set up with drip irrigation facilities to allow the plant (roses, anthurium etc.) to grow to sizes ready for cutting. The cut flowers are then taken to the plant for pruning and precision stem cutting for export. The stems are kept in a cold storage till they are packed for export. The stems have to reach the buyer in 24 hours to retain any value.

North Eastern India was put on the global map of flower exports when the first consignment of the exotic cut flower anthurium from the region was exported to Dubai. The cultivation of anthurium is taken up by farmers in Mizoram's capital Aizawl and in the East Garo Hills of Meghalaya. The plants are being grown along hill slopes under shade-houses with the latest Dutch varieties and modern irrigation systems, including fertigation. The first flowers were harvested in September 2003 and export to other States was started by October 2003, only 11 months from the date of planting. Both the department and the growers have realized that anthurium cultivation is going to be remunerative. Therefore, the cultivation of anthurium has been expanding every year. The number of growers increased from a mere 24 in 2002 to more than 200 in 2004.

The first shipment of 1,000 cut flowers from Mizoram and Meghalaya was exported by the Bangalore-based ZOPAR Exports Private Limited to Al Lokrit, Dubai, one of the biggest wholesalers in West Asia. Emirates Air flew the consignment from Kolkata to Dubai. Since Guwahati does not provide the timing or flight schedules which allow the 24-hour deadline to be met. Zopar not only guarantees buy back but also helps in quality control at the Centre. The controlled production at the centre also allows the economics of floriculture to be demonstrated to the farmers. The Agricultural Processed Food Products Export Development Authority (APEDA) has provided subsidy for carting the consignment from the farm to the airport for export, apart from the other general incentives on international freight.

In the coming months, both Mizoram and Meghalaya are likely to export other floriculture products, including roses, leather leaf fern, liliium, bird of paradise etc. which are being cultivated in the North Eastern Region due and favourable climatic, soil and water conditions. And despite the locations being in remote areas of Aizawl and Williamnagar, farmers have been able to grasp and adopt the latest technology and produce international quality anthurium under the supervision and guidance of ZOPAR Exports Pvt. Ltd.

Looking at the demand for anthurium within and outside the country, there is good market scope for anthurium flowers. Further, the market is expanding. There is excellent scope for export to Japan, West Asia, Singapore and EU countries. In realizing this Zo anthurium Grower Society Ltd. targeted and projected that the present production would be increased to 10 fold by the end of 2006. Anthurium will be one of the major sources of State income in the near future. However,







Box 4.3 Contd

this would be highly dependent upon necessary infrastructure being available to the growers. While acting as a demonstration for farmers, the centre also takes plants, vegetables and fruits (strawberries) from the farmers and undertakes quality control and their export for them. Zopar also buys directly from the farmers but the centre monitors the pricing of products to make sure that the farmers get their due. This is done by monitoring on the Internet the final prices of the relevant products purchased from the farmers.

While floriculture seems to have its market mainly in the west, there are also sales in Guwahati, Kolkata and Delhi. In fact, the first sales are made in the domestic market unless a consignment is already committed to the export market. In the case of fruits and vegetables the domestic market is the main target. There is also some evidence that some farmers are switching from producing paddy to strawberries as basic terrace farming is quite conducive to growing this fruit. In the case of floriculture, the question that may be asked is: why are NER States a good choice since the original plant still comes from Holland? The advantage of the NER States seems to lie in their climate (this saves air conditioning costs in greenhouses) and land availability. However, labour costs are high in NER so this is no significant advantage.

While the economics of floriculture and horticulture seems very appealing, the real issue is that without the intermediary role played by experts, the farmers would be ill-equipped to handle the process which is highly capital intensive. Once again, as in the case of all cash crops the crucial issue is marketing. Is the private sector to be allowed in or should the States form a federated body? This is a question that must be answered given the low faith that the States seem to have in NEREMAC after the fiasco of the crash in the ginger prices last year.

Source: Field Trip Visit by the Study Team to the Centre for Excellence.

Box 4.4 shows the monthly availability of horticulture produce in NER. Banana, vegetables and flowers are grown at peak throughout the year. July and August are the best months for ginger and the rest of the year has low production. The cultivation of apples is possible only during August to October. Pineapple and turmeric are produced at peak and are lean in all the months. Cashew is cultivated only from April to June.

Box 4.4 Availability of Horticultural Produce

Products	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Apple												
Pineapple												
Orange												
Passion fruit												
Banana												
Turmeric												
Ginger												
Cardamon												
Vegetables												
Cashew												
Flowers												
PEAK												
LEAN												
OFF												

## 4.8 Forestry and Other Natural Resources: Significant Unexplored Potential

Satellite data for 2002 indicate that the green cover in NER at 52 per cent was more than twice the proportion of the coverage in the country (23.68 per cent). In Arunachal Pradesh, the proportion of area under forests was the highest in the country at 94 per cent. But as a Government report in February 2008 said, India's national animal, the tiger, is being poached to extinction in different parts of the country, and even former safe havens in Assam and Arunachal Pradesh, despite their supposed high forest cover, are not secure.

Since international environmental issues are a responsibility of the Government of India, Payment for Environment Services (PES) need to be concluded with international organizations such as GEF on fees that would accrue to the North Eastern States for their protection of





watersheds, biodiversity and landscape beauty as well as for achieving carbon sequestration/storage for mitigation of greenhouse gases. The States need to prepare, with the assistance of consultants and the centre, plans for compensation for practices which can be compensated/rewarded or form environmental rewards. These would include community conserved areas, energetic conservation of natural resources and wildlife, sacred groves, conservation agriculture, well-developed agro forests and villages managed on ecological principles.

However, these are not merely to be regarded as carbon sinks for the world or repositories of biodiversity and wildlife but used for creating a better quality of life by developing a sustainable use of existing available natural resources, exploitation of resource potential e.g., hydropower that entails minimal submergence and loss of habitat for people as well as flora and fauna, bio technology applications for medical plants and herbs and exploitation of man made plantations.

India is a resource-rich country but its mining potential has been far less explored than other comparably endowed countries. The Mines and Minerals Act and the Mineral Concession Rules as well as FDI policy have been revised on several occasions with a view to attracting private investment for the exploration of mineral deposits and operation of mines, but actual investment in this area has been very meagre because of procedural hassles and numerous discretionary provisions in the laws which discourage prospective investors. The provisions for rehabilitation are also unsatisfactory.

A comprehensive review of the policy and of the laws and procedures in this area is urgently needed to identify and eliminate the constraints in the way of investments in mining activities. The High-Level Committee on the National Mineral Policy conducted such a review and submitted its Report to the Government in July 2006 making a number of important recommendations (see Box 4.5). These need to be considered for early implementation in order to stimulate investment including foreign investment, in the mining sector. The procedures should ensure that there is seamless transition from the stage of reconnaissance permit through prospective license to mining lease, and security of tenure is guaranteed to the maximum extent possible. The conditions for resettlement must also be made transparent and the rights of those whose land is acquired must be suitably protected.

**Box 4.5 : Main Recommendations of the High Level Committee on the National Mineral Policy**

- i. Mining involves broadly three stages—reconnaissance, prospecting and mining proper. The transition from Reconnaissance Permit (RP) to Prospecting License (PL) to Mining Leases (ML) should be seamless, by giving the right to the RP holder to get a PL and to the PL holder to get a ML.
- ii. Provisions in the Act and the rules that enable the centre and the States to abridge and even cancel the concession should be amended so that concessionaires have security of tenure.
- iii. RPs should be non-exclusive with an open sky policy to maximize investment in exploration.

- iv. Prospecting companies should have a right to transfer the PL with the accompanying right to be granted a ML. Easy transferability of concessions would result in unbundling of exploration from exploitation activities and stimulate investment in exploration.
- v. Where a State Government has not passed an order within the prescribed timeframe the Central Government may pass an appropriate order, after giving an opportunity to the State Government of being heard.
- vi. Mining companies should develop social infrastructure in the villages in the area where the mine is situated. One option suggested by the committee is that mining companies should spend three per cent of the turnover on social infrastructure in the villages.
- vii. The method of fixing royalty rates should be *ad valorem* rates so as to substantially augment State revenues.
- viii. Where a mineral-rich State receives multiple applications, it should be entitled to give preference to the applicant who offers to set up an industry based on the mineral. However, where no applicants make a proposal for setting up an industry, these should not be held up in the expectation that in future such an applicant might turn up.
- ix. In the best interest of the country the mining policy should provide space for both stand-alone and captive mines.
- x. The regime of quantitative restrictions and canalization of iron ore exports should be replaced by an export duty (only on high grade lumps with Fe content of 65 per cent and above) and elimination of restrictions on fines and lower grade fines.

In general, NER is endowed with considerable natural resources and hosts 38 per cent of the country's river waters, 20 per cent of the hydrocarbon (oil and gas) potential, large quantities of low-ash coal resources, limestone and dolomite deposits and other minerals. Yet the region has been unable to process many of these resources for two main reasons: the large investments required and environmental regulations. Tapping river resources, however, would be very beneficial for power generation and irrigation, but would call for large investments and the construction of multi-purpose dams would need agreement among states (or even countries).

## 4.9 Livestock and Fisheries: Reducing the Dependency on 'Imports'

All the States are surplus producers of meat but are highly dependent on 'imports' to meet their demand for eggs, fish and milk. An analysis of the NER's dependency on the rest of the country for its major livestock products is given in chart 4.3 (and Table 4.5A in Annexure 4.1).<sup>11</sup> Meat production per head for the NER (1.3) is higher than the national average (0.93). The dependency on milk 'imports' is high because cattle is used primarily for meat production rather

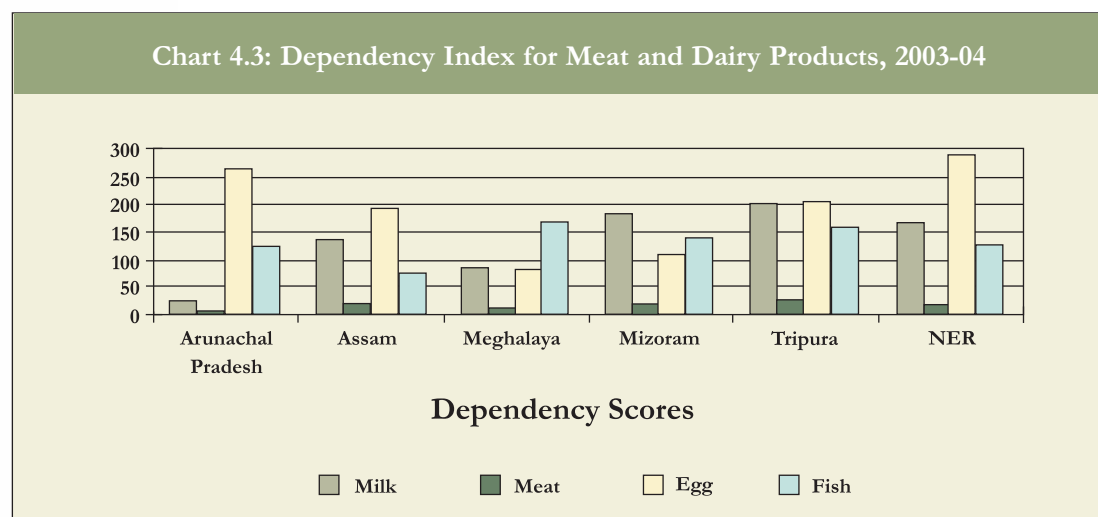
<sup>11</sup> Separate consumption data for meat, eggs and fish are not available, but the consumption share of these three products in total consumption is assumed to be 1:4:5 for the purposes of calculating dependency indices for each product. In general, fish is the preferred food item in the plains while meat is preferred in the hills. Since more than 80 per cent of the population of NER lives in the plains, fish has been assigned a higher weight than; eggs, as the least expensive product of the three, have been assigned a lower weight.

than for milk, there is low buffalo per head ratio (0.02 compared to the national average of 0.09), and low milk productivity of cattle in the region.

Most of the livestock in the region (more than 65 per cent) is in Assam, with the remaining 35 per cent distributed across the other seven States (Table 4.5A in Annexure 4.1). While only 1 per cent of the total land on average in the region is available for pasture and grazing (less than the national average of 4 per cent (Table 4.1), it is as high as 10 per cent in Sikkim. While the Government has been making efforts to increase the productivity of cattle through cross-breeding and other measures, so far these have not been very successful.

The two main fish-producing States in NER are Assam and Tripura, partly reflecting regional tastes and partly the availability of resources (mainly storable water) for fish cultivation. But production per capita in NER (5.9 kg) is lower than the national average of (6.2 kg). Coupled with the high demand intensity for fish (Table 4.6A in Annexure 4.1) this results in a high regional dependency on fish 'imports'.

The livestock and fisheries sectors together account for about 30 per cent of the value of the output of the agriculture and allied sector and provide full-time and part-time employment to 5.5 per cent of the total working population, a majority of whom are women. India continues to be the largest producer of milk in the world with a total production of 91 million tons in 2005-06. The contribution of milk was higher than paddy, wheat and sugarcane in 2003-04. Yet the low per capita availability of milk at 231 gm. per day during 2003-04 suggests scope for further expansion. Our calculations of the Dependency Index (DI) for NE States also justify these facts of low per capita milk availability. Matters are even worse regarding meat, with abattoir conditions bad and utilization of by-products inefficient. But the DI results show that the NE States are self-sufficient with respect to meat production. Poultry development in the country has shown better progress over the years, primarily because research and development schemes of the Government have been complemented with effective management and marketing by an organized private sector.



Source: Statistical Abstracts 2003-04 and NSSO 2002

Note: Indices are computed; see Annexure 4.3 for details.

Again lack of private sector activity in the NE States in the poultry sector and the consequent high consumption of chicken meat have resulted in high dependency for eggs (see Annexure 4.3 for DI scores). Overall, the fisheries sector in India has also performed well but vast potential still exists, particularly in inland fishery. But data and results of DI contradict these average figures of the fishery sector for NE States who import bulk fishery from Andhra Pradesh (GoI, 2006).

It has been suggested that fish and poultry dependency could be substantially reduced by de-silting large water bodies and promoting integrated fish/duck/paddy farming. Some of these initiatives are being promoted through Self-Help Groups in the rural areas of the region, and have several benefits apart from increasing employment and income-generation such as more efficient use of land and possible flood control.

## 4.10 Horticulture and Floriculture: State-wise Thrust Areas Among Others<sup>12</sup>

### Arunachal Pradesh

Thrust areas are identified as *medicinal plants, floriculture, fish production and animal husbandry*.

**Medicinal Plants:** There are more than 500 species of medicinal plants in Arunachal Pradesh. Most of these are in great demand by pharmaceutical companies, so priority should be given to producing these on a commercial scale.

**Floriculture:** The State offers great potential for the development of floriculture. Recommended flowers are cymbidium, gladiolus, liliun, dendrobium, anthurium and foliage plants.

**Fish Production:** There has been a steady growth in fish production to 2,800 tons in 2005-06. Major problems faced in the production of fish are the incidence of floods, resource under-utilization and traditional and unscientific methods of production.

**Animal Husbandry:** This has great potential in a hill State like Arunachal Pradesh. The people of Arunachal consume high quantities of meat, a sizeable proportion of which is brought from outside the State. This conclusion is at variance with the dependency index for meat (see Table 4.3A, Annexure 4.1), but perhaps weightage to meat for Arunachal Pradesh needs to be increased.

### Assam

It is the biggest State in the region in terms of population and extent of economic activities. The thrust areas identified are:

**Fish Production:** The State has tremendous potential for fish production, which was as high as 1, 90,000 tons in 2004-05. Despite the steady growth in fish production, there is high dependency as shown by Dependency Index (see Table 4.3A, Annexure 4.1).

**Tea:** In the agricultural-based industries, tea occupies an important place in Assam with the tea industry contributing substantially to the economy. Both RSI and NSI (Table 4.7A and

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<sup>12</sup> Dependency index links with the recommendations of the L.C. Jain Committee Report and the Shukla Commission Report



4.8A, Annexure 4.1) show its greatest comparative advantage.

### **Manipur**

**Floriculture:** A wide range of ornamental flowers are found in this part of the region, mainly gladiolus, lilies, chrysanthemum, roses, anthurium, gerbera and dahlia. Orchids also deserve special attention. The State can also promote the cultivation of cymbidium, paphiopedilum and dendrobium which are in great demand.

**Animal Husbandry:** Livestock rearing is one of the major income-generating activities in the rural areas of Manipur. Cattle, buffalo, sheep, goat and pigs are the main livestock in the State. There is no Dependency Index data for Manipur.

### **Meghalaya**

**Floriculture:** A variety of commercially important flowers are found in this area because of favourable climatic conditions. The main ones are orchids, bulbous plants, birds of paradise, chrysanthemum, gerbera, gladiolus, marigold and carnations.

**Livestock and Fisheries:** Meghalaya has witnessed a steady growth of milk, egg and meat production, and fish production is also significant in the State. Due to the high consumption of these products, several markets exist in the State, which is shown in the Dependency Index for meat, fish and eggs.

### **Mizoram**

**Medicinal and Aromatic Plants:** The steady growth of medicinal and aromatic plants in Mizoram is due mainly to agro-climatic conditions. Cultivation of these plants is more profitable than traditional agriculture because of tremendous demand in domestic and international markets.

**Livestock and Fisheries:** There is a wide demand for meat, fish, eggs and milk within the State because of the high consumption of these products. This is also indicated by the Dependency Index for meat, fish and eggs.

### **Nagaland**

**Medicinal and Aromatic Plants** are found in abundance in the State due to favourable climatic conditions. **Ginseng** is the most valuable medicinal plant, commonly available in Nagaland, and has tremendous commercial potential for export. The most commonly used medicinal plant from which **Citronella oil** is produced, has a good market and is also used in making perfumes, mosquito repellents, ointments and sprays.

**Floriculture:** Abundantly available flowers in Nagaland are cymbidium tribe, dendrobium tribe, cattle and vanda. There is great scope for the expansion of floriculture for commercial purposes.

**Sericulture:** The geo-climatic conditions of the State are favourable for the rearing of silk worms such as Eri, Mulberry, Oak Tasar and Muga. There is wide scope for silk production in the State.





Shri Neiphiu Rio, Chief Minister of Nagaland at a Tea garden in Nagaland

**Tea:** There is a wide scope for tea plantations in the State.

**Livestock and Fishery:** There is huge scope for rearing poultry, birds, ducks, pigs, goats and rabbits.

### Sikkim

**Floriculture:** Sikkim is a paradise of flowers mainly gladioli, anthuriums, lilliums, primulas, rhododendrons and orchids.

**Aquaculture:** Sikkim is blessed with an extensive network of freshwater rivers, lakes and streams.

**Livestock:** It is primarily an agrarian economy and there is vast opportunity for rearing livestock for meat as well as milk products.

### Tripura

**Medicinal and Aromatic Plants:** The major medicinal plants grown in the State include roughtia serpentine, withania somifera, chorophytum borinillianum and emblic myrobalans whereas the main aromatic plants are cymbopogan flexuosus, cymbopogan spp. and pogostemon cablin.

**Floriculture:** Various varieties of flowers such as marigold, tuberose, rose, gladioli and chrysanthemum are grown in the State.

**Rubber:** Rubber is cultivated in large quantities, and can be used in a variety of products such as coir foam, household, industrial gloves, latex adhesive, latex foam, latex thread, rubber bands, surgical gloves and toy balloons. The RSI and NSI show greatest comparative advantage in natural rubber for Tripura.

**Tea:** The fertile soil and agro-climatic conditions in Tripura are suitable for the development of tea plantations. The NSI supports the cultivation of tea in this part of the region.



**Animal Husbandry:** There is wide scope for dairy farming and goat and pig rearing in the State.

## 4.11 Non-Farm Activities

Enhancing rural incomes will also depend on making available multiple livelihood opportunities by increasing non-agricultural employment based on local strengths and resources, strengthening capital formation in the primary sector and, in the process, harnessing the inherent strengths contained in the rural economies of NER. The region has a huge potential in developing the rural industrial sector because of its large natural resource base and labour force in the plains. The addition of value to products produced locally will increase employment and income-generating opportunities. The major rural non-farm activities include handicrafts and handlooms, bamboo-based activities and processing of dairy products (into butter and cheese), poultry, fish and other livestock and agro and horticultural products.

### (a) Handicrafts and Handlooms

Handicrafts from NER are famous all over India. The major crafts of this region are based on resources such as cane and bamboo, wood, terracotta, textiles, bell metal and brass. (Table 4.9A, Annexure 4.1). Cane and bamboo based crafts are available in almost all the NE States.

The total number of handicraft units operating in NER is roughly 20 per cent of the total number in India, which provides employment to 22 per cent of the total handicraft artisans in the country (Table 4.9A, Annexure 4.1). In value terms, its share in the production is around 80 per cent of the total value of handicraft items produced in India. Among the NE States, Manipur has the highest number of craft units followed by Tripura but in terms of the value of production, Nagaland has the highest production followed by Assam. In general, the handicraft sector is the



Assam Silk



most important industrial sector in the NE region and it has great potential for exports as well.

There are around 20,00,000 handlooms in NER of which around 1.5 lakh are idle (Table 4.10A, Annexure 4.1). The number of handlooms is more in Assam and it also has the highest number of idle looms. More than 60 per cent of the households are dependent on income from handicrafts and handlooms to a large extent (Table 4.11A in Annexure 4.1).

Lack of a proper market and supply network remains a major problem in the development of handicrafts in the region. According to the strategy in the 'Draft Paper of the Steering Committee on NER for the Eleventh Plan (2008-12),' the North Eastern Handicrafts and Handloom Development Corporation (NEHHDC) should be involved in the procurement and marketing of handicrafts and handlooms in the region to boost the sector.

### (b) Bamboo-Based Activity

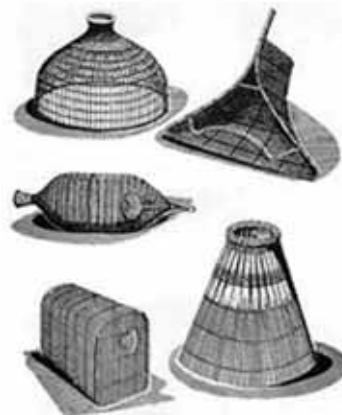


Cane Hat

Bamboo plays an important part in the lives of the people of the NE States. It is an integral part of the socio-cultural and economic traditions of the region. Bamboo grows in natural forests, and is cultivated in homesteads, groves and on private plantations.<sup>13</sup> Bamboo can be used for multiple purposes, as building and reconstruction material, for food and medicinal products, handicrafts, for energy production through gasifiers and in the paper industry (Madhab, 2003). It plays a very important role in shaping the economies of the NE States by providing large employment

opportunities. More than 60 per cent of country's bamboo resources are available in the NE States and 20 per cent of the world's resources are grown in the region (Viaphei, 2005). After China, India has the richest bamboo genetic resources in 136 species including 11 exotic species of which 58 species belonging to 10 genera are found in the Northeast. According to the United Nation's Industrial Development Organization (UNIDO), the bamboo business in the Northeast region would be worth Rs. 5,000 crore in the next 10 years. The National Mission on Bamboo Technology and Trade Development envisages expansion of India's bamboo market to US \$5.5 billion by 2015 (Viaphei, 2005).

Mizoram alone contributes 14 per cent<sup>14</sup> of the country's growing stock of bamboo with about 9,210 sq. km. (49.10 per cent) of the State's geographical area of 21,018 sq. km. (Table 4.12A, Annexure 4.1). It is followed by Assam, Arunachal Pradesh and Manipur. Bamboo stock in million tons shows that Assam tops among the NE States followed by Manipur, Mizoram and Arunachal Pradesh. The presence of bamboo is very negligible in Tripura and Nagaland.




Fishing Instruments made of Bamboo

<sup>13</sup> Extracted from the website of the National Mission on Bamboo Applications (NMBA).

<sup>14</sup> The Bamboo policy of Mizoram, 2002.







At present, the volume of bamboo production falls short of national demand. The current demand for bamboo in India is estimated at 28 million tons, only half of which is presently available (Madhab, 2003). So there is a need to improve the productivity of bamboo in the NE States, since more than 60 per cent of the bamboo resources are available here. The expansion of the bamboo sector in NER is handicapped by lack of scientific methods for propagation and cultivation, lack of post-harvest treatment and technology for product development, inadequate trained manpower and inadequate infrastructure for large-scale harvesting in the event of gregarious flowering.<sup>15</sup>

A number of initiatives have been taken by the National Mission on Bamboo Application (NMBA) to develop the bamboo sector in NER. These include development of appropriate tools for primary and secondary processing, conversion of bamboo/waste bamboo to activated carbon, process technology for bamboo boards and development of design and product initiatives, furniture development and entrepreneurs' meets (Madhab, 2003). Accordingly, provisions have been made to arrange finance for bamboo development from the Technology Information Forecasting & Assessment Council (TIFAC), the National Mission on Bamboo Applications, NEC, NEFDi and other banks.

### **(c) Agro-Processing**

The region's comparative advantages in producing fruit, vegetables and other products can be tapped for providing rural employment by setting up small-scale processing units for the local market. A small processing unit requires relatively little capital. Locally produced spices mustard seeds, and so on can be processed and marketed locally. Similarly, there is plenty of scope for the local processing of fruit and vegetables, spices such as ginger, chillies and so on.<sup>16</sup> Arunachal Pradesh has taken up cultivation of horticulture produce especially of sub-tropical fruits in a large scale with assistance from the Government. In addition to infrastructural facility of cold storage and cold chain, mini processing units for processing low grade fruits are essential for the State.

There is also scope for dairy processing. More milk production would encourage the milk, butter and cheese processing industry in the region. There can also be poultry, fishery and piggery processing industry in the region. There is a huge demand for dried fish in the region, processing of which is not capital intensive. The National Dairy Development Board, which has extensive experience in mobilizing producers in milk, vegetables as well as other areas could play a key enabling role in this process.

## **4.12 The Way Forward for Agriculture**

Agriculture will fulfill its crucial role in employment generation when there is coordination in production and marketing among the States of the region. The short-run focus of the vision is to move farmers from subsistence cultivation to cash-crop-oriented production, with each State specializing in its areas of comparative advantage. Apart from these crops, where geo-climatically appropriate States will help farmers engage in commercial floriculture (roses, anthuriums, liliuems,

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<sup>15</sup> Extracted from National Bamboo Mission, Ministry of Agriculture, Government of India.

<sup>16</sup> The draft paper of the Steering Committee on NER for the Eleventh Plan (2008-12) also suggests encouraging the food processing industry in the region

#### Box 4.6: The Role of NGOs in Diversifying Rural Livelihood Opportunities

Different community-based organizations have been working across the region to help the poorest rural people in various hill districts to improve their livelihoods through environmentally sound management of their resource base and an expansion in their livelihood opportunities. The introduction of Self-Help Groups (SHGs) have especially changed the lives of women in these areas.

IFAD also emphasizes on the role of NGOs in:

- Propagating information to farmers;
- Participatory development in agriculture; and
- Micro-financing (RRBs and NABARD).<sup>17</sup>

#### Box 4.7: North Eastern Region Community Resource Management Project for Upland Areas (NERCRMP): IFAD

NERCRMP has been working in rural and often inaccessible villages in North East India since 1999, and currently has projects in Assam, Manipur and Meghalaya. The project aims to empower tribal communities for sustainable livelihood pursuits. Self-Help Groups (SHGs) along with Natural Resource Management Groups (NRMG) have been introduced by the project as key community institutions, which can serve as vehicles of economic and social empowerment of villagers. Financial support is provided to the SHGs, who have access to a revolving fund and micro-credit. This has allowed women to expand their livelihood opportunities and plan their livelihood strategies better.

Coupled with financial support, women have been offered training and skill development in better farming techniques and in new areas such as patchouli cultivation and distillation. Armed with these, they have set up micro-enterprises and group enterprises to earn better incomes and hence also save. They have been able to access funds from banks and other financial institutions. A majority of the SHGs have received loans from banks ranging from Rs. 1,000 to 50,000.

The project has conducted workshops to train farmers and NGOs in SHG cluster formation and biodiversity, and has promoted agricultural activities like *jhum* modification, paddy-cum-fish, cattle rearing, goatery, piggyery, terrace development and various dry farming

gerberas, carnation, birds of paradise, heliconia, leather leaf and other foliage plants) and low-volume, high-value horticulture crops mainly strawberries, coloured capsicum, cherry tomatoes, gherkins asparagus and broccoli).

States and farmers will only successfully be induced to specialize in a few agricultural products when inter-State trade takes off, so the strategy in the short/run will need to concentrate

<sup>17</sup> The land tenure system prevalent in most of the states in the region (except the non-scheduled areas) restricting alienation of land from a tribal to non-tribal together with absence of personal ownership rights and commensurate land records makes it difficult for banks to lend in the region. Important suggestions by committees constituted to analyse the issues of credit supply in NER include using social capital as alternative collateral and devising alternatives to land documents for extending small credit.





activities. Their activities cover areas such as changing traditional landholding patterns to benefit marginal and small farmers (especially in West Khasi Hills District, Meghalaya and Sadar Hills of Senapathi District, Manipur). The initiation of niche markets in medicinal plantation and handicrafts and other non-farm activities have been successful and have managed to transform farmers from traditional agriculturists to entrepreneurs.

A recent evaluation<sup>18</sup> conducted in the West Garo Hills villages confirms that women's quality of life has improved in terms of income and savings, consumption patterns, empowerment, health and nutrition awareness, linkages with line departments and skill development. Although in general women's work burden has also increased, they did not seem to mind this since their overall quality of life has improved.

Source: IFAD: Informal Credit and Savings Groups open the way to self-reliance and empowerment of women (<http://www.ifad.org/gender/learning/sector/finance/6.htm>) Adapted from Nongbri, Tiplut. 2000. *Empowering Women through Self-help Groups: A Case Study of Three Naga Villages, Manipur*. Rome: IFAD.

on its promotion. This will depend crucially on efforts to ease constraints on natural resources such as land and labour, and on the free movement of goods within the region.

#### 4.12.1. Easing Constraints on Natural Resources

The use of productive resources to the fullest potential will need to be promoted by easing constraints on land. The abundance of natural resources overall in the region masks the significantly differing proportions in which these resources exist across States (Table 4.1). Some States are liberally endowed with forest land, others have very little; some States have no land available for cultivation (Arunachal Pradesh) while some other have plenty (65 per cent in Manipur).

The low availability of land in most of the NER States especially the hill areas suggests a focus on those agricultural activities where land use is minimum. In addition, the scarcity of labour in these States would mean that the activities should ideally be capital-intensive agriculture and agro-based industries, such as plant nurseries, floriculture, fruits, ginger and turmeric and processing of these products. The situation, however, is very different for Assam and Tripura where population densities are high (in fact, higher than the national average for Assam), which must target relieving labour from agriculture by developing employment opportunities in industry.

A workable policy for improvement of shifting cultivation through material and technological input support needs to be in place to ensure optimal utilization of *jhum* lands. Such a policy would have to be evolved in consultation with the farming community.

The following main conclusions can be drawn about natural resource constraints in agricultural growth in the hills:

1. Availability of land severely limits the scope for land-intensive production of agriculture in most of the States of NER (barring Assam and Tripura). These States need to encourage

<sup>18</sup> The project applied the systemization technique of participatory evaluative documentation involving NERCMP project and partner staff in October 2005. This technique has been popularized by IFAD's Latin American network FIDAMERICA. It emphasizes use of participatory tools by stakeholders and community groups in a systematic manner to evaluate and document the process of development. For more information on the systematization methodology please visit [www.enrop.org](http://www.enrop.org).

such agricultural activities where land use is minimum such as plant nurseries, floriculture, ginger and turmeric and processing activities based on such products.

2. Providing better crop technology and micro-credit in hill States to *jhumias* or cultivators who use the slash and burn methods theirs is a sustainable process (Ramkrishnan) as well as a community activity. Their incomes and livelihoods can improve with these injections of technology and credit and they can be lifted out of the margins of economic activity.
3. A very significant proportion of cultivable land is available in the hill areas. Attempts should be made to make this land cultivable.

#### 4.12.2. Facilitating the Movement of Goods

There needs to be greater connectivity among, between and within States, especially the hill States, in terms of roads, railways and air. The hill regions are not as yet connected by rail. There are air connections to the capitals of some States such as Manipur and Tripura but other States like Arunachal Pradesh, Meghalaya and Sikkim have no air connectivity. Nagaland is connected both by rail and air from Dimapur which is actually an outskirts plain area on the border with Assam. Thus, poor transport facilities severely limit the scope of trade and specialization particularly in agricultural products which are bulky and perishable. Farmers have taken up horticulture and floriculture production on a large scale in several NE States under various avenues of Government support. Transport of the produce from the farm to the market, both within the North Eastern Region and outside is hampered due to poor connectivity and shortage of specialized means of transportation. On the lines of industrial produce, a transport subsidy for farm products upto Kolkata and Siliguri is being demanded by States.

#### 4.12.3. Creating a Marketing Framework: The Cluster-Based Approach

The highly perishable nature of agricultural goods becomes an issue when there are several small farmers and little inter-State coordination. Farmers will need some support in marketing their products if they are to be induced to make the shift to cash crop production. Further, unless States coordinate their production and storage plans, excessive production can lead to a market crash as happened recently in the case of ginger production in some of the NER States. The large demand for food items created by the 'captive markets' of the region such as the army and security forces, could be tapped into to expand the regional market.

The short-run development approach will be cluster-based to realize greater economies of scale and specialisation. For this, the cultivated area of the State should be divided into crop-wise clusters based on comparative advantages, with each cluster defined as a Crop Development and Marketing Unit (CDMU) which emphasizes on the marketing aspects of the cluster. Collection centres will need to be set up near the clusters, which will have linkages with clusters in other regions, to promote economical linkages with the wholesale market. Marketing intervention, especially for horticultural produce, with a full compliment of post-harvest infrastructure and market network, is fundamental. These CMDUs would be given appropriate managerial and financial flexibility for assisting producers to realize reasonable profits from their efforts.



Establishment of a cold chain along major arterial highways is critical if the region is to exploit its rich horticulture potential and market these products to the rest of the country. The operation of the cold chain could be based on a PPP model or on a lease-basis with private entrepreneurs.

### 4.13 Short and Longer-Term Vision

The analysis in this chapter has concentrated on trying to isolate what should be the focus areas for agricultural development. The basic presumption is that the hilly States in particular have limited resources in terms of both land and people. Hence, highly land and labour intensive agriculture is not feasible. In addition, each State can reasonably specialize in a few agricultural products as long as inter-State trade is promoted to make cash crop production an economically viable option for the farmers.

The vision for agriculture has both short-and long-run dimensions. Given the crucial role of agriculture in employment generation, the short-run focus must lie in coordinating both production and marketing among the States of NER. In other words, the short-run product focus should be to move agriculture from being subsistence to cash-crop oriented with appropriate State specialization as suggested by our study. As is obvious this short-run strategy would have an important trade focus.

The short-run development approach should be cluster-based in order to realize greater economies of scale and specialization. For this, the cultivated area of the State should be divided into crop-wise clusters based on comparative advantages. Each cluster needs to be defined as a CDMU, stressing the marketing aspects of the cluster. Collection centres will be set up near the clusters, which will be linked with clusters in other regions, so that economic linkages with the



wholesale market can be possible. Marketing intervention for horticulture produce, with a full compliment of post-harvest infrastructure and network of markets, is fundamental. These CMDUs would be bolstered with appropriate managerial and financial flexibility for assisting producers to realize reasonable profits.

Establishing a cold chain along major arterial highways is critical if the region is to exploit its rich horticulture potential and market products to the rest of the country. The operation of the cold chain can be on a PPP model or on a lease basis with private entrepreneurs. The focus should be on high-value items like commercial floriculture for flowers like roses, anthuriums, liliuems, gerberas, carnation, BOP, heliconia, leather leaf and other foliage plants and low-volume, high-value horticulture crops mainly strawberries, coloured capsicum, cherry tomatoes, gherkins, asparagus and broccoli.

However, in the longer run, the States must attempt to move the labour force out of primary agriculture into less land/labour intensive areas like horticulture, dairy farming and forestry based non-timber products. Examples of the latter are medicinal plants. There is already evidence of this happening in a significant way in Sikkim and Mizoram in the case of horticulture and bamboo in Assam, Meghalaya and Nagaland. However, it must be remembered that these sectors are highly capital intensive in terms of the requirements of dedicated transport corridors and specialized storage facilities.

To translate the long term-vision into reality it is worth noting again the need to coordinate the strategies of States in marketing, trade, etc. Without this no State would have a sufficient volume of production to cater to outside markets. It may also be noted that in some cases Sikkim might well be considered an outlier to the general principle of joint strategizing.

## **4.14 Plantation Crops and Exports (Commodity Boards and APEDA)**

### **4.14.1 COFFEE**

Coffee cultivation in NER started in the Cachar District of Assam in 1953. Commercial cultivation started in the 1970s in Garo Hills (Meghalaya) to wean away the local community from *jhum* cultivation practices. The initial growth and establishment of coffee in NER was encouraging. A comprehensive survey was carried out by the Board in the 1970s for coffee development in NER. Over 40,000 ha. in about 300 villages of 39 districts in seven States of NER was identified for coffee cultivation. With financial support from NABARD a coffee planting programme was undertaken by the State Plantation Crops Development Corporation in Assam, Arunachal Pradesh, Manipur, Nagaland and Tripura and Soil Conservation Department in Meghalaya and Mizoram. An extent of about 13,000 ha. was brought under coffee by this programme, of which 7,000 ha. was handed over to 5,000 tribal growers. Later, coffee plantations of corporations/departments were abandoned due to lack of financial support from State Governments. Various socio-economic reasons also led to the neglect of holdings with the tribal sector.

Coffee has a long gestation period which involves sustained investments and efforts. But the long gestation period acts as a deterrent to small growers. Lack of post-harvest and inadequate





marketing facilities have been a hindrance to the growth of coffee in NER. A total of 5,473.54 ha. is under coffee cultivation out of which 2,640.52 ha. has reached bearing stage. The maximum plantation area is in Nagaland (2,129 ha) followed by Mizoram (933.8 ha), Meghalaya (866.20 ha) and Assam (754.39 ha). Coffee holdings are small and scattered. Of 1,453 holdings, 1,452 holdings are below 10 ha. each in Nagaland. Similarly out of 1,510 holdings in Mizoram, 1,507 are below 10 ha.

### *Special Area Programme (SAP):*

*Coffee has been implementing a Special Area Programme (SAP) in NER from the Ninth Plan onwards.*

*The objectives of SAP are to:*

- Promote coffee cultivation in tribal tracts.
- Wean away local communities from *jhum* cultivation.
- Generate gainful self-employment.
- Increase productivity/production.
- Expand/consolidate coffee area.
- Help afforestation through shade trees to maintain an ecological balance

### *Support under SAP:*

#### **Under SAP, the Coffee Board Extends:**

- Subsidy @ Rs.15,000/- per ha. for coffee expansion/consolidation.
- Market support @ Rs.10/kg. towards cost of collection, curing, transportation and marketing of coffee.
- Supply seed material for coffee expansion/consolidation.
- Training on cultivation aspects to growers.
- Technological inputs to growers to improve productivity and quality.
- Establishment of SHGs as part of a community approach.

Under SAP, the Coffee Board assisted expansion of coffee plantations in 3,198 ha. and coffee consolidation in 690 ha. during the Tenth Plan in NER. About 2,200 ha. was under coffee cultivation at the end of the Ninth Plan and around 3,200 ha. was brought under fresh planting during the Tenth Plan.

Production in 2005-06 was around 250 MTs comprising 175 MTs of Arabica and 75 MTs of Robusta. The present productivity levels are very low (<100 kg/ha).

### *Support for consolidation of existing coffee holdings*

- The Board extends Rs. 15,000/ ha. to take up the following cultivation practices to improve production/productivity in existing coffee holdings:





- Infilling of vacancies and aftercare (seeds/poly bags/nursery).
- Soil management and amendment practices (trenches, soil conservation, liming and manuring).
- Shade planting and shade training.
- Bush management (centring, handling and pruning).
- Plant protection measures.

### *Certain Gaps Identified in Coffee Development in NER:*

The Coffee development programme has been taken up in a scattered manner across all States of NER. Some gaps identified are:

- There is lack of adequate technical manpower to take up development activities.
- Lack of involvement by concerned State agencies.
- Inadequate adoption of technology by growers due to socio-economic reasons.
- Poor accessibility and security issues .
- Large vacancies in coffee holdings.
- Long gestation period of coffee requiring sustained investments and involvement which is a deterrent to tribal growers.
- Only Board's support (Rs.15,000/ha) insufficient to attract growers for consolidation activity.
- Inclement weather coinciding with harvest contributing to the deterioration of quality.
- Inadequate processing and marketing facilities.
- Diseases/disorders specific to NER (black bean).

### *Strategies for Coffee Development in N.E. Region <sup>19</sup>*

- There should be consolidation of coffee development in most suitable locations.
- Coffee development should be restricted to technically feasible regions in a cluster approach, giving priority to those areas where State Governments participate in coffee development.
- Focus should be on a coffee based cropping system to augment overall farm income.
- Emphasis should be on capacity building among stakeholders.
- There should be proper infrastructure support for processing.
- There should be financial support for expansion, consolidation, quality up-gradation and market development.

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<sup>19</sup> Based on the recommendations of a techno-feasibility study to assess the status of coffee development in NER conducted by a team of senior scientists and extension officers of the Coffee Board in 2006.



- Expansion of coffee in new areas seeds, nursery, planting (coffee+shade), after care.
- Consolidation of weak coffee holdings.
- Gap filling, plant and shade management, soil management, pest and disease control.
- Quality upgradation.
- Pulpers, drying yards, storage diversification.
- intercrops viz. banana, areca and citrus
- Market support.

### *The Way Forward:*<sup>20</sup>

The programme implemented by the Coffee Board has sensitized tribal people to coffee cultivation methods and to some extent contributed to the improvement of their economic condition. Though coffee development has improved the socio-economic conditions of tribal coffee growers to some extent, mixed cropping is needed to generate supplementary income.

- Integration with other Central/State department programmes is a must to facilitate collective implementation of the programmes/schemes.
- Concerted inter-disciplinary bottom up extension approach should be implemented to trigger off the benefits of development programmes.
- Coffee Board to facilitate consolidation of holdings in NER and also provide financial support for expansion and quality upgradation. Inter-cropping in coffee plantations also to be promoted.
- States to cooperate with Coffee Board for raising coffee plantations in clusters particularly in Nagaland and Mizoram which hold maximum potential.
- Coffee Board to provide technical support and build capacity of coffee growers and State Government staff for improving production and productivity and facilitate marketing. Village Development Boards in Nagaland and credible NGOs like YMA in Mizoram be mobilized for community participation. NERAMAC to be involved in collection and transportation of produce to a central location for processing and marketing.
- Coffee Board to promote mixed cropping and provide infrastructure support for processing of the produce. Presently there is only one coffee processing unit at Bualpui in Mizoram.
- Coffee Board to focus on promoting coffee cultivation in agro-climatically suitable areas of NER.

#### **4.14.2 RUBBER**

**Natural rubber** is obtained from the latex of *Hevea brasiliensis*. Rubber plant is a native of Brazil and was introduced in India in 1873. It has a 6-7 years gestation period and economic life

<sup>20</sup> An evaluation study was conducted by The University of Agricultural Sciences, Bangalore. These recommendations are based on their salient observations.



of about 25 years natural rubber is raw material for about 35,000 products in India. India ranks 2nd in productivity (1,727 kg/ha/annum), 4th in production (7,72,000 tons) and consumption (7,89,000 tons) and 5th in area (5,97,000 ha) under cultivation. In India, rubber is traditionally grown in Kerala, Kanyakumari, NER (mostly in Tripura and Assam), Karnataka and Tamil Nadu: 58,432 ha. (comprising 9.8 per cent of the total) area in NER is under rubber cultivation. Rubber plantations provide gainful self-employment and sustainable livelihoods. It generates direct employment—around 1,000 mandays/ha. During the immature phase it provides permanent jobs for seven persons per 10 ha. in mature phase. It provides indirect employment—nursery, production and distribution of plantation inputs, intercropping, rubber dealers, processors, rubber wood cutting, sale, processing and furniture making. It has potential for export of natural rubber (NR) goods to neighbouring countries when production increases.

Besides, it also provides ecological benefits such as a green leguminous ground cover and green umbrella above the soil. It purifies the atmosphere through carbon sequestration; improves soil properties through addition of organic matter, keeps the soil cool, enriches fertility, porosity and its water intake capacity.

### *Benefits of Rubber Planting in North East: Socio-Economic Scenario*

- Gainful self-employment and sustainable livelihood for youth.
- Generates direct employment around 1000 mandays/ha. During immature phase – Permanent job for 7 persons per 10 ha. in mature phase.
- Indirect employment nursery, production and distribution of plantation inputs, intercropping, rubber dealers, processors, rubber wood cutting, sale, processing and furniture making.
- Ancillary income through honey, rubber seeds etc.
- Effective tribal settlement programme.
- Potential for export of NR goods to neighbouring countries when production increases.

### *Ecological Benefits*

- Provides a green leguminous ground cover and green umbrella above the soil.
- Rubber tree has almost all the attributes of a forest species.
- Purifies atmosphere through carbon sequestration.
- Improves soil properties through addition of organic matter, keeps the soil cool, enriches fertility, porosity and water intake capacity.

### *State-wise Potential*

Rubber plantations are a success story in Tripura which is now the 2nd largest rubber growing State with 33.7 per cent of the potential area under rubber. Rubber has been identified as a priority crop for a rehabilitation project in Tripura. The Government of Tripura and Rubber Board jointly work on block plantation projects. Around 2,750 tribal families have been settled



through block planting in around 3100 ha. The Tripura Rehabilitation and Plantation Corporation has been constituted to take up rubber paste resettlement of tribal people. The Tripura Forest Development Plantation Corporation has taken up commercial planting of rubber. TTAADC is also involved in tribal settlement through rubber planting. The Government of Tripura has contributed 40 per cent of the cost of Community Processing Centres and established a Rubber Park with common facilities for rubber based industrial units.

Against a potential of 4.5 lakh ha. in NER, the present rubber plantation area covers only 13 per cent. This is due to various factors including lack of technical assistance, shortage of manpower, insufficient supply of planting material and law and order problems.

### *Status of Operations*

The Rubber Board started activities in NE by opening a field office in Agartala in 1967. From 1985 onwards special schemes for rubber development in NE with components for development, research and NRETC have been in operation. So far planted is 58,432 ha. have been planted and the annual production from the region 23,837 MT.

### *Rubber Organizational Set-up in NE:*

– Zonal Office	2
– Regional Office	8
– Residential Training Centre	1
– Regional Research Station	4
– Rubber Research & Training Centre	1
– Field Office	16
– Tappers Training School	3
– District Development Centre	4
– Regional Nurseries	6

### *Major Constraints for Rubber Development in NE*

- There are operational difficulties due to insufficient manpower—ADRP restrictions.
- There is insufficient supply of planting material, remoteness of planting locations and poor communication facilities.
- There has been extension staff reduction over the last 10 years. In 1997 there were 41 field extension officers. This figure came down to 24 in 2007.
- Frequent eruption of socio-political disturbances and militancy are other constraints.

### *Rubber Development in North East*

The objective is to produce more natural rubber for the socio-economic development of the NER and restoration of soil depleted through shifting cultivation. It will also bring about rural development through employment generation.



## *Strategies for Rubber Development*

- There is a need for the expansion of rubber area and rejuvenation of sick immature plantations.
- Productivity from existing plantations should be increased.
- There should be an economic settlement of tribal people.
- Location specific agro management and processing problems should be addressed through research.
- At the primary processing level there should be quality upgradation for better price for farmers.
- Farmers groups should be formed and empowered.
- There should be proper environment/soil protection.

## *Activities Proposed are;*

### **Integrated Village level Rubber Development**

- **Revitalization and Restocking**—To bring sick immature plantations to normal standards of growth and stand per hectare 1,750 ha. will have to be covered. Assistance for holdings up to 2.00 ha. only.
- **Block planting** will be undertaken in tribal belts with financial support from State Government (50 per cent). Five hundred ha. will be covered.
- **Input supply**—Critical plantation inputs will be purchased by the Board and distributed to small growers through RPS.
- **Demonstration, NRETC, DDCs & RRTC**—Demonstration plots in farmers' fields will be set up and NRETC, DDCs and RRTC in Assam will be maintained.
- **Irrigation Proposed as a life saving mechanism for the first three years only.**
- **Fencing** to protect young plants from cattle and other animals.
- **Farmer Education and group formation**—Formation and strengthening of RPSs & SHGs

## *Quality Planting Material Generation*

- Board's nurseries will be maintained as models and Nucleus bud wood will be supplied to private nurseries. Nurseries by RPS/SHG will be promoted.
- **Research priorities**
  - Evolving high yielding and stress tolerant clones.
  - Evolving rubber based sustainable farming models through trials with other crops.



- Evolving farming practices resulting in cost reduction and increase in yield.
- Studies on diseases and environmental stresses like low temperature, high altitude through velocity of wind etc.
- Evolving suitable harvesting systems.

### *Processing & Quality Upgradation*

- Aimed at improving the quality of rubber sheets produced in the region.
- Promote group processing and effluent treatment through financial and technical support.

### *Market Promotion*

- Transportation assistance for input items and latex. Publication of prices, participation in trade fairs and exhibitions.

### *Human Resource Development*

- Training for growers, tappers, workers and other stakeholders.
- Labour welfare activities.
- Equipping training centres and expansion of office space and residential buildings.

Carbon sequestration offers a major opportunity. It was recognized that rubber plantations hold tremendous potential for providing employment and sustainable livelihoods. Hence there is need for intensive extension work to convert NER into a mini-Kottayam.

Rubber should be the major thrust area, with active collaboration among the stakeholders—Department of Commerce, Rubber Board, Ministry of DONER/NEC and the North Eastern States. Rubber Board to fund for area expansion and rejuvenation of sick plantations and introduce technology for increasing productivity. Rubber Board to address locations specific agro-management and processing problems. Rubber Board to upgrade quality at the primary process level for better prices for farmers and support formation and empowerment of farmer groups. Rubber Board to maintain and support nurseries by Gram Panchayats and SHGs. Department of Commerce to strengthen all commodity boards including the Rubber Board to enable intensification of their activities in NER. States should earmark and allot land for rubber plantations and emulate the Tripura model. State Governments should designate the department and officer as nodal agency in the respective States for coordination with the Rubber Board.

#### **4.14.3 TEA**

China and Assam are the only two regions in the world with native tea plants. The scientific name for the tea plant is *Camellia sinensis*. Tea was placed in the genus *Camellia* by the German botanist Otto Kuntze in 1887. The Assam variety is known as *Camellia sinensis* var. *assamica*

The North Eastern States account for 55 per cent of area under tea and 53 per cent of the total production. The region has 2.8 lakh ha. under tea plantations producing 455 million kg. of tea.

Assam and Tripura are the traditional tea growing States. Assam alone accounts for 2.7 lakh ha. of tea area and 480 million kg. production. The second largest producer is Tripura with only 8,200 ha. under tea and producing 7.5 million kg. Efforts have been made to introduce tea in other States since Eighth Five Year Plan. Tea production in other States is: Arunachal Pradesh (2.34 million kg), Nagaland (0.20 million kg), Sikkim (0.16 million kg), Manipur (0.11 million kg), Meghalaya (0.10 million kg) and Mizoram (0.07 million kg).

## *Tea Cultivation in Traditional States*

### **Assam**

Largest contiguous tea area in the world. Produces more black tea than either Sri Lanka or Kenya. There are 780 tea estates registered with the Tea Board. The State has 527 estate factories, 197 BLF, one Cooperative and one instant tea factory. The average productivity is around 1800 kg. made tea/ha. Spread over 27 districts of Assam, there are about 50,000 small growers of whom only about 3,000 are registered with Tea Board.

### **Tripura**

There are 58 big tea estates with planted area spread over the districts of Dholai, South, North and West Tripura. There are about 1,500 registered small tea growers and 11 workers' cooperative gardens, two workers cooperative gardens have their own tea factories. Durgabari Tea Estate Workers Cooperative Society Ltd., is one of the best managed cooperatives with remarkable achievements.

### **Non-traditional areas in Assam**

#### **Karbi Anglong (ASSAM)**

This Autonomous District has hill areas with gentle slopes making the entire district suitable for tea cultivation. There are 15 established tea estates located in the revenue sub-division of Diphu covering about 4,160 ha, 302 small tea growers are registered with the Tea Board having a total tea area of 1,952.57 ha.

#### **N. C. Hills District (ASSAM )**

Declared a Non-traditional area in 1991 for extending financial assistance under the Board's schemes for control of *jhum* cultivation. The Tea Board has given registration to three projects and one small tea grower for planting tea on an area of 709.54 ha. However, one project (Kopili T.E.) was sanctioned for an area of 200 ha. with loan assistance of Rs. 80 lakh and subsidy of Rs.50 lakh from the Tea Board. Further, an amount of Rs. 2.65 lakh was provided to the small tea grower in the form of subsidy.



## *Tea Cultivation in Non-Traditional States*

### **Arunachal Pradesh**

The State has taken a lead over the other non-traditional tea growing States of the region. Teas grown in the hill slopes of Arunachal Pradesh have distinct characteristics and are comparable with Darjeeling tea. At present there are 42 registered tea estates with a planted area of 837.39 ha, eight estate factories and seven bought leaf tea factories. Fifty small growers are registered with the Tea Board. Under the Tea Quality Upgradation and Product Diversification Scheme a sum of Rs. 32.98 lakh has been disbursed to two tea factories. Arunachal Pradesh Forest Corporation Ltd. acted as the nodal agency and had received substantial grants from the Tea Board for development of nurseries and also loan and subsidy. The project areas where planting has been taken up are located in the districts of Lohit, Tirap, Changlang, Lower Subansiri, Dibang valley, and East Siang.

### **Sikkim**

Temi tea estate produces tea which is comparable to Darjeeling tea. There is good scope for specialty tea and superior marketing would lead to better returns. Main constraint in the State is the availability of land.

### **Meghalaya**

Tea Experimental Centres at Umsning, Rongram and Riango were established in 1976-77 with the support of the Tea Board and in 1978 planting was carried out with material brought in from Assam and Darjeeling. The Tea Board has been extending grant-in-aid for setting up nurseries since 1982-83. Planting materials are supplied free of cost to the farmers to cultivate small holdings of two hectares per family. There are 69 tea growers covering an area of 577.86 ha. which are registered with Tea Board. There are two factories, one located at Umsning in Ri-Bhoi district and the other at Rongram in West Garo Hills District.

### **Nagaland**

Tea is grown in seven districts—Kohima, Zunhebphoto, Muckokchung, Mon, Phek, Twensang and Dimapur. Small scale tea cultivation has been taken up as an alternative to *jhum* cultivation. The Tea Board has given registration to 2,753 small farmers covering an area of 19,264.36 hectares.

### **Mizoram**

There are over 75 year old plantations at Biate and Ngopa extending over an area of about 140 ha. The State Government launched tea development schemes in 1992-93 and targeting 2,000 ha. at Biate, Ngopa, Pawlrang, N.E. Bualpui, Khawdungsei, Tlungvel, Darlawng and Selling. So far the Tea Board has given registration to nine TEs covering an area of 391 ha. There are 697 registered small tea growers covering an area of 1,934.34 ha. Processing is done using traditional methods and the products marketed locally.

## Manipur

Tea is grown in the districts of Senapati, Tamenglong, Ukhrul and Jiribam. The Tea Board assisted the Manipur Plantation Crops Corporation Ltd. in 1982 and about 233.03 ha. have been brought under tea. The Tea Board also provided financial assistance for setting up of nurseries. Of late, a number of NGOs have been promoting small farmers to take up tea plantations; 484 small tea growers covering an area of 1,362.61 ha. have so far been registered by the Tea Board.

## *Tea Industry in the NE Region*

Assam tea is well known for its distinctive quality, especially for its strong strength and a rich body, taste and colour. In order to provide it a distinct identity the Tea Board had introduced a logo for Assam Tea. Steps have been also initiated to register Assam Orthodox tea as a G.I.

Being young and mostly colonial plantations, the tea produced in the non-traditional North Eastern States is of superior quality. There is good scope for producing organic and other specialty tea in this region

## *Primary Marketing of Tea*

The Guwahati Tea Auction Centre is the biggest in India and is mainly for domestic trade. In 2005, this centre handled 143 million kg. of tea valued at Rs.865 crore. The volume handled by constitutes 31 per cent of the total tea produced in the region. Now there is demand for setting up new auction centres at Dibrugarh and Jorhat. The Tea Board is the licensing authority and licences for the new centres will be given as and when the industry or the Government comes forward with proposals. Electronic auctions expected to be functional by the second half of the year.

## *Tea Exports from the Region*

World famous Assam Orthodox/CTC is mainly exported to developed markets like UK and Europe. There is scope for export of specialty tea including organic and high-grown, produced by small growers in the hilly non-traditional regions. Assam has a dry port at Amingaon. In order to facilitate direct export, incentive @Rs.1.50 per kg. is provided by the Tea Board towards the cost of freight and handling charges of containers from Amingaon ICD up to the point of trans-shipment at Haldia port in West Bengal.

## *R& D Centres in the Region*

Tocklai Experimental Station at Jorhat—the oldest tea R&D Centre in the world—is managed by the industry under the aegis of the Tea Research Association (TRA) with 80 per cent funding by the Government through the Tea Board. TRA has five centres in Upper Assam (Dikom) and North Bank (Thakurbari), South Bank, Cachar (Silcoorie), Tripura (Agartala). These provide advisory service to their member gardens accounting for 71 per cent of the total tea area of the region. Under a Tenth Plan scheme, TRA has set up an advisory cell for providing technical support to small growers.





### *Special Development Programmes are being Implemented by Tea Board in the Region Including:*

- Replanting/rejuvenation of old and uneconomical sections.
- Assistance to small growers for taking up tea cultivation (new planting).
- Modernization of tea factories and creation of facilities for dual manufacture of tea (orthodox and CTC).
- Marketing of Assam logo.
- Research grants to TRA (49 per cent from plan budget +31 per cent from AED funds).
- Training for plantation managers, supervisory staff and workers through the Indian Institute of Plantation Management, National Productivity Council and other institutions.

Special development programmes for small tea growers in the North Eastern Region include:

- Arranging **training programmes** through the Tea Research Association and Assam Agricultural University, Jorhat.
- Setting up of **nurseries** through State Government agencies for supplying planting materials to small tea growers.
- **Advisory services** through field visits on practical aspects of cultivation and providing soil analysis service.
- Arranging **study tours** to visit various tea growing areas in India as well as to countries such as Kenya and Sri Lanka.
- Financing **Self-Help Groups** for construction of leaf sheds, procurement of transport vehicles, weighing scales, plastic crates, plucking bags for leaf handling etc. Disbursements under plan schemes for new planting by small tea growers.

**There are many symptoms and key reasons for sickness/closure of tea gardens:** Poor price realizations (1999-2005) was the last straw leading to several closures. Most sick gardens have one or all the following conditions:

- Poor condition of factories.
- Poor field assets and poor yields.
- Uneasy industrial relations scenario.
- 'Remote Control' style of management.
- Weak financials with funding strategy highly debt oriented.
- Defaults in payment of statutory and loan liabilities.

### *The Major Constraints are:*

#### **Transport:**

**Movement of Inputs i.e,** foodgrains for plantation workers, fertilizers, plant protection chemicals, machinery etc.

### **Movement of made tea**

Points of sale for exports are major ports (63 per cent exports through Kolkata, Haldia and Cochin). Points of sale for internal market are mainly western India. While all the agricultural products are entitled to Central transport subsidy in the North Eastern States, this subsidy is not given for tea. Extending this subsidy to the tea industry will help in bringing down the cost of production and make the product cost competitive in the export market.

### **Ownership of small tea gardens in Assam**

In Assam, the reported number of small growers is more than 40,000 but only 2,927 growers have been registered with the Tea Board. Most growers do not possess proper land documents and they are not in a position to avail of any financial assistance from the Tea Board or from banks/financial institutions. There is the need to regularize land ownership for facilitating the development of the small holdings.

### **System of landholding**

Community ownership of land in States other than Assam and Tripura leads to difficulty in determining of the ownership and in the creation of security. A continuing guarantee by the concerned State Governments will perhaps be a solution acceptable to the banks which needs to be worked out.

### **Restriction of tea cultivation in Arunachal Pradesh**

The union Ministry of Environment and Forests have stipulated that its clearance should be obtained before taking up tea cultivation. Clearance given by the State forest department is not acceptable. This stipulation has come in the way of many growers in taking up tea cultivation in Arunachal Pradesh.

**ManPower:** Limited availability of skilled labour, supervisors and the managerial cadre is a distinct impediment in the systematic development of tea plantations. Policy restrictions with regard to entry of labour from other States is one of the major hindrances in launching large scale commercial tea projects. There is also the need to set up a large infrastructure towards human resource development.

## *The Way Forward:*

### **Replanting**

Replantation/rejuvenation holds the key to the long-term competitiveness of the Indian tea industry given the high age profile of tea bushes. Around 2,12,000 hectares which fall into the vulnerable category of low yielding areas need to be targeted for replantation/rejuvenation. The Department of Commerce has established a Special Purpose Tea Fund (SPTF) on January 17, 2007. With assistance from this fund 1 lakh

proposed to be renovated in the NER over the next 15 years with investment of about Rs.2,500 crore. Productivity in NER is low compared to countries like Kenya where the productivity is as high as 25 tons/ha.



### **Factory schemes**

- Modernization of factories, creation of infrastructure for cleaning, blending and packaging are needed.
- Quality assurance certification. ISO/HACCP and Organic Tea Certification.
- Product diversification production of green tea and specialty teas is required.

### **Field schemes**

- Incentive for orthodox tea production.
- Replanting and rejuvenation.
- Extension planting.
- Irrigation and drainage.
- Small growers: Green leaf transportation, pruning, Self-Help Groups.

### **Labour welfare measures**

- Drinking water—Creation of water point source with hand pump and platform/ring well.
- Sanitation.
- Educational stipend for the wards of workers for pursuing higher studies.
- Capital grant for extension of school buildings and construction of hostels.
- Capital grant for extension of medical facilities and purchase of medical equipments.
- Support to sports activities.

### **Training programmes**

Short-term executive programmes (STEPS) for plantation managerial staff. Setting up of IIPM Centre in (Assam)

### ***Export and Domestic Promotion Schemes***

- Transport subsidy for the teas exported directly from ICD Amingaon (Assam).
- Support for export promotion to exporters part reimbursement of travel and exhibition.
- Promotion of packaged teas of Indian origin carrying logos.
- Scheme for setting up tea boutiques selling Indian specialty tea.
- Activities conducted entirely by the Tea Board include domestic tea promotion, participation by Tea Board in international fairs and exhibitions, market research, conducting buyer-seller meets, trade delegations (both inbound and outbound), promotional activities in association with the industry include promotion of origin teas jointly with tea associations. Streamlining the electronic auction system for online trading of tea.

### **R&D**

Support to TRA, TRF. Research Schemes through TRA, UPASI-TRF and other institutions.

## Fresh Initiatives

SPTF

ISRO Schemes:

1. Village Resource Centres covering small growers.
  2. Creating geo-database of the tea industry
- IIT Kharagpur-proposal for establishing International Tea Engineering Research Centre at IIT, Kharagpur with the Tea Research Association collaboration of (TRA). IIT to look at development of mechanical aids to improve work efficiency; improvements in processing technology, including energy conservation and product diversification.
  - Centre for Development of Advanced Computing (C-DAC).
  - Scheme for creation of quality parameter database using e-nose and e-vision systems for all tea gardens in India.
  - Establishment of Centre of Excellence in Darjeeling.
  - Setting up of small grower cell within the Tea Board.
  - Mini factories pesticide residue infrastructure under TRA, UPASI-TRF.
  - E-auctions—Greater stress on demand generation.

It is important for the Tea Board to introduce incentives for orthodox tea planting and setting up Village Resource Centres to assist small tea growers.

More mini factories need to be set up.

Tea Board to announce a separate logo and GI for Assam Orthodox Tea within three months. Assam Government to issue 'possession certificates' to all small tea growers within one month to enable them to register with the Tea Board.

Transport subsidy for tea exported directly from ICD, Amingaon, Assam @Rs.1.50 per kg. to be introduced.

Tea Board to support promotional activities in association with the industry.

Tea Board to streamline electronic auction system for online trading of tea. Tea Board should support Tea Research Association (TRA) and Tea Research Foundation (TRF).

Tea Board to support labour welfare measures including capital grants for extension of school buildings and construction of hostels, medical facilities and purchase of equipment, sports activities, sanitation and drinking water for tea garden labour.

Tea Board to support diversification/multi-cropping and intensify marketing support.

### 4.14.4 Spices

NER's climatic conditions offer vast scope for promoting production of spices, particularly high value organic spices. Spices the lakadong turmeric, bird eye chilli and ginger grown in NER have high intrinsic value and hold vast industrial and pharmaceutical potential. Hill areas of Sikkim, Nagaland, Meghalaya, Mizoram, Manipur and Arunachal Pradesh hold high potential for large



cardamom, organic ginger, turmeric and chillies.

There is great scope in promoting production of organic spices in these States by popularizing organic farming practices among growers. *Various schemes are being implemented by the Spice Board in NE States including:*

**1. Large cardamom development**

Rs. 17,500 per ha. is offered as subsidy including the cost of planting materials in two annual installments of Rs. 15,000 and Rs. 2,500 respectively.

**2. Construction of large cardamom curing houses (modified *bhatties*)**

200 kg. capacity - Rs. 5,000.

400 kg. capacity - Rs. 9,000.

**3. Production of Organic Pepper**

Rs.12,500 per ha. is offered as subsidy including the cost of planting material in two annual installments of Rs. 10,000 and Rs. 2,500 respectively.

**4. Setting up of Vermi Compost Units**

Rs.1,250 is provided as subsidy by unit.

**5. Organic cultivation of lakadong turmeric**

Rs. 2,500 per ha. towards 50 per cent of the cost of planting materials is offered as subsidy. Certification is organized by the Board meeting the costs.

**6. Organic cultivation of ginger**

Rs. 12,500 per ha. is offered as subsidy towards 50 per cent of the cost of planting materials. Certification is organized by the Board meeting the costs.

**7. Supply of driers for ginger and turmeric**

Rs. 10,000 per drier is provided as subsidy.

**8. Construction of warehouse cum cold storage**

For construction of warehouse cum cold storage by farmer's associations, market committees etc. a subsidy to the tune of 75 per cent of the cost of construction, limited to Rs. 112.50 lakh is offered by the Board.

**9. Training of officers of North Eastern States**

The officers of the agri/horti departments in North Eastern States are trained in research stations/research farms in south India on production and processing of spices every year. The entire expenditure on travel, TA/DA, accommodation and training expenses are fully met by the Board.

**10. Training of farmers of North Eastern States**

Selected farmers are taken to Kerala for training on production and processing of spices every year. The entire expenditure for this is met by the Board.





### 11. Extension advisory services

Technical/extension support to growers on scientific aspects of cultivation and processing are provided through personal contact, field visits, group meetings and through distribution of literature by the technical officers of the board.

### 12. Recognition of large cardamom growers

For encouraging healthy competition among large cardamom growers the board has instituted large cardamom productivity awards.

### 13. Rapid multiplication units in the North East region

- All Mizoram farmers Union, Aizwal, Mizoram
- Agro Tech Composite Nursery, Dimapur, Assam
- Marjum Welfare Society, Arunachal Pradesh
- A.B. Tanyam Society, Ziro, Arunachal Pradesh
- P.D.Pasaria Foundation, Narangi, Guwahati
- Santhi Sadan Ashram, Guwahati, Assam
- Rural Resource & Training Centre, Umran

### *Equity Fund to Promote Spice Processing in the North East*

To motivate entrepreneurs/NGOs/farmers' group to set up processing units as a forward linkage to their spice cultivation:

- Support for export processing units set up in the north east or by organic farmers elsewhere.
- Up to 49 per cent or Rs.1 crore whichever is less.
- Two units being considered.

### *New Initiatives*

Training in Good Agricultural Practices (GAP) is being given to unemployed rural youth who have a background in spice farming (10+2 science).

- 3 months duration
- stipendiary
- residential

### *Major Problems Faced are:*

- Lack of active support from the State horti/agri departments
- Non-availability of quality planting materials
- Inadequate knowledge on better post-harvest practices
- Lack of adequate infrastructure for quality testing, packing and storage
- Non-availability of organic certification facilities



## *Support Required*

- Technical input on selection of seed/planting material, cultivation practices and pest and disease management by State/spices board.
- Promoting NGO/Self-Help Groups among farmers.
- Development of departmental nurseries for raising high yielding disease resistance planting material.
- Establishing contract farming/common facilities for cleaning, grading, packing and storing.
- Special campaign for organic spices.
- Cultivation/certification for chillie, ginger and turmeric.

## *The Way Forward for North East Spice Industry*

- It is important to prepare the North Eastern Region to compete with Far Eastern countries by encouraging organic production, value addition and export of:
  1. Pepper
  2. Large cardamom
  3. Turmeric
  4. Ginger
  5. High colour chilli and
  6. Culinary spices
  7. Rosemary, thyme, parsley and oregano
- Promotion of spices grown in North Eastern States under common logo preferably on retail packaging is required.

ITC has shown its willingness to work in association with Sikkim, Meghalaya and Nagaland and the Spice Board for cultivation, processing and export of cardamom, ginger, turmeric and Naga chillies. Tata Tea is investing in the cultivation of black pepper and marketing of ginger and other spices. The Spice Board pays the cost for obtaining organic certification for the growers and has recognized 12 agencies for this purpose. The Spice Board needs to strengthen its presence in NER and assist the States and growers for improving productivity and marketing the produce. Current investments by the Spice Board in the NER are inadequate (Rs.17 crore proposed to be invested during the Eleventh Plan). Low productivity also affects spice production in NER.

Spice Board to be strengthened and to intensify its activities in NER to promote the production of spices particularly of organic spices. Investments by the Spice Board to be increased commensurate with the proposed intensified programmes in the region. The tripartite agreement between ITC, State Governments and the Spice Board be signed during the 3rd N.E. Business Summit being organized jointly by M/o DONER and ICC, Kolkata at New Delhi from 10-11 April 2007.

#### 4.14.5 APEDA:

##### **Agro potential in North East: Role of APEDA**

The goal of APEDA is to maximize foreign exchange earnings through increased agro exports; to provide better income to the farmers through higher unit value realization and; to create employment opportunities in rural areas by encouraging value added exports of farm produce. Its vision is to establish India as a reliable supplier of quality agro products at competitive prices.

##### **Agro products from NER are:**

- **Major fruits:** banana, citrus, pineapple
- **Thrust fruit:** jackfruit, apple, guava, papaya, mango, plum, peach pear
- **Spices:** ginger, cardamom, pepper and turmeric
- **Medicinal and aromatic plants:** Tea

Major Horticulture Produce of North East:

- Chillies, potato, turmeric, ginger, jackfruit, papaya, pineapple, banana and citrus

##### *Export Potential of Horticulture Produce from North East:*

- Processed food and Jackfruit: Assam and Tripura
- Pickles Processed/frozen cubes for food, medicinal and industrial use papaya: Assam and Manipur
- Processed juices, pulp and slices: Meghalaya; Pineapple: Tripura and Assam Arunachal Pradesh
- Fresh and Processed Banana: Arunachal Pradesh and Assam
- Fresh Fruit, processed juices and Squash: Arunachal Pradesh, Assam, Meghalaya and Tripura

##### *APEDA's Strategy for Development of Horticulture is Through:*

- Providing assistance for infrastructure facilities-packhouses, cold storages, refrigerated transport units
- It also gives training to the farmers through:
  - Pre-and post-harvest training programmes.
  - Quality awareness programmes.
  - Preparation of pre-and-post harvest manuals in local languages and distribution among the farmers.
- It provides transport assistance for horticulture products from NER.
- It helps in building external market linkages for food processing units in NER with major players in food sectors like Hindustan Lever, Dabur, ITC and other companies.
- It has established model organic farms for Joha rice and sugarcane in Assam, Passion fruit in Manipur and pineapple in Tripura. There have now been handed over to the respective State Government.



## *APEDA's Efforts*

- It conducted a workshop on setting up a floriculture park near Guwahati.
- It is sponsoring delegations of exporters from NER every year for visiting Aahaar.
- It sanctioned an integrated packhouse facility for handling perishable products in Mizoram at Rs. 320 lakh.
- It assisted NERMAC Ltd., and Government of Tripura with four refrigerated vans for export of pineapples.
- It is giving training to progressive beekeepers. The training is being given by a German consultant at Jorhat.
- It sanctioned Rs.315 lakh to AIDC, Guwahati for an integrated packhouse for ginger.
- APEDA is signing an MoU with M/s. CONCOR which will operate and manage all infrastructure projects (CPC, walk-in type container etc) in NER.
- Techno economic feasibility study for CPC at Guwahati airport under preparation.
- Walk in type cold stores at Agartala, Aizwal, Imphal and Dimapur airports are being set up. State Government/AAI to identify space.
- Kolkata airport: New CPC is under construction.
- Bagdogra airport:CPC sanctioned.

## *Status of Tripura AEZ*

### **Pineapples**

- This AEZ entails a total investment of around Rs. 15.66 crore, out of which Rs. 8.11 crore is from State Government agencies with remaining coming from the private sector.
- MoU signed in February 2002.
- Will benefit to more than 400 farmers in the first phase. Incremental exports are expected to be Rs. 32 crore within the next four years.
- Land has been allotted by the State Government and Ministry of Food Processing Industry has sanctioned Rs. 4 crore for the food park.

## *Status on Sikkim AEZ*

### **Ginger**

- The project entails an investment of Rs. 24.61 crore out of which Rs. 6.67 crore will come from the Central Government agencies, Rs. 10.06 crore from State Government agencies and the private sector will put in around Rs. 7.88 crore
- MoU signed in August 2002.
- Around 5,000 farmers will benefit along with more than 500 persons in processing and value addition.
- 150 farmers have been identified by the State Government for training and extension staff has been selected.

## *Status of Sikkim AEZ*

### **Floriculture orchids and cherry pepper**

- The project envisages an investment of Rs. 32.31 crore of which Rs. 8.09 crore from Central Government agencies; Rs. 2.40 crore from State Government agencies and the remaining Rs. 21.82 crore from the private sector.
- MoU signed in August 2002.
- Export of Rs. 53 crore of orchids and cherry pepper is anticipated in the next five years. Department of horticulture, Sikkim has been sanctioned Rs. 300 lakh for integrated packhouse for floriculture projects at Rangpo in the 1st phase and in the 2nd Phase at Melli along with two cold stores by APEDA.
- Project for orchid cymbidium cut flower by M/s. Siam Floritech, New Delhi with an investment of Rs. 543 lakh. Rs. 253 lakh sought under ASIDE scheme.
- Government has sanctioned Rs. 75 lakh under EDF to M/s. Sikkim Himalayan Orchid. Additional assistance of Rs. 1.22 crore sought under ASIDE scheme.

## *Status of Assam AEZ*

### **Fresh and processed ginger**

- The project entails an investment of Rs. 17.53 crore with Rs. 2.27 crore coming from Central Government agencies, Rs. 4.93 crore from State Government agencies and Rs. 10.33 crore from the private sector. APEDA has approved Rs. 315 lakh for common infrastructure facility a packhouse with four collection centres for processing and export of ginger to AIDC Guwahati. Rs. 157 lakh have been released.
- MoU signed in April 2003.
- This project will benefit farmers and would create direct employment for more than 500 persons in processing and value addition sectors.
- Exports of Rs.2.17 crore were noted during 2005-06.

## *Recent Initiatives*

- Food testing laboratory and cold storage facility (along with Guwahati, Bagdogra, Dimapur and Aizwal) will be set by APEDA at Imphal.
- Development of floriculture sector in Manipur.
- Visit of APEDA team to Arunachal Pradesh to undertake detailed study regarding effective use of transport subsidy for NE State.
- Clarification regarding extension of inland transport assistance through helicopter.

### **Issues and areas of concern**

- Lack of awareness and infrastructure in all the States resulting in poor response from exporters/farmers to take up new ventures.
- State Governments not responding to communications sent.





- Perceived lack of clear strategies in promotion of organic products by the States. Multiple departments/agencies in the States on the subject (no single window option for coordination with APEDA).
- No takers for Horticulture Transport Assistance Scheme introduced in 2001, despite modifications in the scheme. Need for an effective coordination channel in all the States. A nodal officer may be identified for timely response and action on all matters.
- Proactive approach by the States, more proposals like SGSY special projects may be prepared for holistic development.

Due to lack of awareness and infrastructure in all NE States there is inadequate response to APEDA initiatives. Cold storage facilities either do not exist or those that do are extremely inadequate. Similar is the position with respect to marketing arrangements. Out of APEDA's total exports of Rs.70,000 crore per annum (including Rs.12,000 crore per annum of Basmati rice), NER's share is only Rs.4.8 crore. It was observed that a large proportion of exports from the NE States is through the informal route to neighbouring Bangladesh. This is not reflected in APEDA's export figures. It was also observed that traders buy and transport produce outside the NER before exporting it. As a consequence, there are no subsidy claims under APEDA's Transport Subsidy Scheme and the producers do not benefit. APEDA's primary responsibility is to set up cold storage facilities at five airports—Guwahati, Aizawl, Imphal, Dimapur and Agartala. The need for cold chain facilities in coordination with cargo companies needs to be emphasized.

APEDA is to operationalize four Agriculture Export Zones (AEZs): One in Tripura for pineapples, two in Sikkim for ginger, orchids and cherry pepper and one in Assam for fresh and processed ginger by December 2007. APEDA to submit a report to the department of commerce on the status of cold storages at the Guwahati, Aizawl, Imphal, Dimapur, Agartala and Bagdogra Airports with time lines for their completion. APEDA should expedite conclusions of negotiation with cargo companies to provide complete cold chains in NER and coordinate consultations with CONCOR and NERAMAC to work out the logistics for a complete cold chain from the field to the point of export. State Governments to designate nodal departments/officers for interaction with APEDA. State Governments to assist Commodity Boards and APEDA in matters relating to land acquisition, organization of farmers, awareness programmes and identification of clusters, etc.

## 4.15 Flood Control and Irrigation

The topographical and geographical location of NER is unique with the hydro-meteorological situation making it one of the highest rainfall zones in the world.

The Brahmaputra and Barak basins, particularly in Assam, have earned notoriety for the awesome hazards of annual floods and erosion that create mayhem every year, bringing misery to the people and shattering the fragile agro-economic base of the region. Assam represents one of the most acutely hazard-prone regions in the country, having a total flood prone area of 3.15 million ha. as against a total flood prone area of 3.58 million ha. for all the eight States in NER. The flood prone area of the North Eastern States, as assessed by RBA is given in Table 4.4.

Floods in Assam are caused by a combination of natural and anthropogenic factors. The unique geo-environmental setting of the basin vis-à-vis the eastern Himalayas, the highly potent

monsoon, weak geological formation, active seismicity, accelerated erosion, rapid channel aggradation, massive deforestation, intense land use pressure and high population growth, especially in the floodplain belt and ad hoc temporary flood control measures are some of the dominant factors that cause and/or intensify floods in Assam.

The Central Water Commission (CWC) is a premier Technical Organization of India in the field of water resources that is presently functioning as an attached office of the Ministry of Water Resources, Government of India. The Commission is entrusted with the general responsibilities of initiating, coordinating and furthering, in consultation with State Governments concerned, schemes for control, conservation and utilization of water resources throughout the country, for purposes of flood control, irrigation, navigation, drinking water supply and water power development. It also undertakes investigations, construction and execution of any schemes as required.

The Brahmaputra Board, a statutory body, was set up by the Government of India under the Ministry of Irrigation (now Ministry of Water Resources) through a Central Act in 1980 and it became operational in 1982. It emerged as a regional institution to monitor, develop and implement flood management strategies in the valleys of North East India.

**Table 4.4: Flood Prone Areas in NER**

S.No.	State	Geographical area (mha)	Flood prone area (mha) (As assessed by RBA)
1	Arunachal Pradesh	8.37	-
2	Assam	7.85	3.15
3	Manipur	2.24	0.08
4	Meghalaya	2.24	0.02
5	Mizoram	2.11	-
6	Nagaland	1.66	-
7	Sikkim	0.71	-
8	Tripura	1.05	0.33
	<b>Total</b>	<b>26.23</b>	<b>3.58</b>

The functions of the Brahmaputra Board include carrying out survey, investigations and preparation of master plans; preparation of Detailed Project Reports for identified schemes in water resource projects and drainage development schemes; construction of multipurpose dams and other works in the North East as approved by the Central Government.

Since its inception in 1980 the Brahmaputra Board has made several recommendations to deal with floods, but has failed to evolve a workable solution for the problems faced by the marginalized population living along the stretch of the *chars* and *chaporis* (sand bars) so frequently affected by floods.

The Brahmaputra Board should play a more active role in carrying out its mandate in the region and taking up flood control schemes in all North Eastern States. It should not confine its activities to any one State as it appears to have done so far. The projects already taken up by the



Brahmaputra Board and presently in various stages like surveying, investigation and preparation of master plan, and DPR, have to be expedited.

As per the directions of the Prime Minister, a task force chaired by the Chairman, Central Water Commission, with representatives of the concerned States, Central organizations and eminent experts was set up by the Ministry of Water Resources in August 2004 to look into the problems of recurring floods in Assam and the neighbouring States of Bihar, West Bengal and eastern Uttar Pradesh. This task force recommended immediate and short-term measures in different States at a cost of Rs. 1915.00 crore. The recommendations of the Task Force are as given in Table 4.5.

**Table 4.5: Recommendations of the CWC Task Force**

S.No.	State	Measures (Rs. In crore)			Total
		Immediate	Short-termI	Short-termII	
1	Assam	116.10	382.81	350.00	848.91
2	Tripura	9.53	57.22	25.76	92.51
3	Manipur	11.95	38.50	228.76	279.21
4	Meghalaya	0.79	66.50	12.00	79.29
5	Sikkim	10.00	122.98	64.50	197.48
6	Arunachal Pradesh	9.55	137.97	40.04	187.56
7	Mizoram	5.59	40.05	-	45.64
8	Nagaland	-	4.81	-	4.81
9	Brahmaputra Board	-	80.00	100.00	180.00
	<b>Total</b>	<b>163.51</b>	<b>930.84</b>	<b>821.06</b>	<b>1915.41</b>

The pace of implementation of the recommendations of this task force has been very slow. The recommendations for taking up flood management measures as Short-term-I and Short-term-II have not been operationalized as yet. Besides, the implementation of the recommendations made as immediate measures has also not been satisfactory. The Brahmaputra Board along with the Ministry of Water Resources has to take up immediate and short-term measures in consultation with the States for flood and erosion control.

It is recognized that absolute flood control and protection is not feasible and that flood management measures are aimed at a reasonable degree of protection from flood losses. A judicious combination of structural and non-structural measures aimed at reducing the vulnerability and risks of the people and places to the hazards of flooding and erosion must be implemented in a phased manner. So far the entire emphasis has been on structural measures such as embankments, spurs, dykes, porcupines, bamboo cribs and permeable screens. Of late multi-purpose storage reservoirs seem to have caught the imagination of the planners as a single window solution to moderate flood peaks as well as generating power. Non-structural measures such as flood plain zoning watershed management, soil conservation, afforestation, real-time flood forecasting, reduction of susceptibility to flood hazards and damage and enhancing the coping capability of the affected people to floods are yet to be encouraged and adopted in reality. Catchment treatment plans that include massive afforestation both in upstream highlands and downstream flood plains are needed to stabilize the channels of the tributaries of the rivers and reduce silt load in the flow.

NER can be broadly divided into three geographical regions: the Surama Valley, North Eastern Hill Basin and the Brahmaputra Valley. The hills and the plain regions differ significantly in terms of the availability of water, population density, habitation patterns, climatic conditions, soil quality and forestry and biodiversity.

The availability of large water bodies in the plains of the Surama Valley and the Brahmaputra Valley of Assam makes them suitable for agriculture and plantation crops as well as for promoting *pisciculture* and fisheries. On the other hand, in the hill areas, the lack of rivers for irrigation and the difficulties of storing water due to hill slopes have compelled farmers to depend mostly on *jhum* cultivation. Besides, in high altitudes, water run-off is rapid and, therefore, the region lacks water for agriculture during the winter season despite having abundance of rainfall in summer. Thus, lack of irrigation facilities and absence of water retention practices severely limit possibilities of multiple cropping resulting in low land productivity. Herein lies the importance of water retention projects in the hills in order to move away from traditional *jhumming* to modern technology based farming such as horticulture and floriculture.

Besides, the variability of rainfall in the North East region is considerably high in space and time making some parts of the region water deficient and affecting peoples' lives in general and agriculture in particular. Therefore, storage, preservation and sustainable utilization of rain, surface and ground water is a must in these water-scarce regions. There is an urgent need to draw up plans to handle situations of wider disparity in rainfall and water availability for agriculture, irrigation and other purposes in these States. Development of ground water, which is in the nascent stage in NER would have to be accelerated.

The Accelerated Irrigation Benefit Programme (AIBP) is a major Central programme for assisting States to take up irrigation schemes/projects. In the North Eastern States, most of the schemes are Minor Irrigation (MI) schemes. The scope of AIBP has been extended since 1999-2000 to include surface MI projects in special category states of the North East. However, there are various bottlenecks in the implementation of AIBP in the North Eastern States including:

- Delay in land acquisition.
- Inadequate and late release of funds by the States to the projects;
- Difficult law and order situation in some of the States. Shortage of construction material due to lack of unrestricted road communication.

Under AIBP only surface irrigation schemes can be taken up and these do not include tapping of ground water. However, there are certain States like Tripura where there is inadequate surface flow and, therefore, these States are unable to access benefits under this scheme.

As per AIBP scheme guidelines, the Surface Minor Irrigation schemes in NER are eligible for assistance provided that individual schemes are benefiting irrigation potential of at least 20 ha. and the development cost of these schemes per ha. is less than Rs.1 lakh.

The absorption of funds, under AIBP, by the State Governments of the North Eastern States has been very poor so far. Further, due to a delay in the release of funds by the Ministry of



Water Resources, very limited working period is available to the States for implementation of schemes.

The State Governments have to streamline their systems for accessing and optimizing the use of AIBP funds. The North Eastern Council (NEC) would have to assist these States by providing funding to the States for engaging consultants for preparation of project reports for micro/minor irrigation projects.

The Central Water Commission has to ensure early release of funds for implementation of ongoing projects. In addition, the Planning Commission should examine the pattern of release of installments to the State Governments so that the loss of working period can be avoided.

In view of the difficult conditions in the NER States, the Ministry of Water Resources would have to examine the possibility of modification in the AIBP scheme, like increasing the limit of project cost per ha. and providing for maintenance for MI schemes and reducing the area of irrigation potential to 5 ha. per scheme.

MOWR should also examine taking up the ground water irrigation scheme under AIBP including construction of check dams, which would be beneficial for States with inadequate surface flow. However, MOWR with the Central Ground Water Board (CGWB) will have to explore the possibility and desirability of exploitation of ground water in NER in view of the possibility of hazardous elements.

After the announcement by the Prime Minister a North East Water Resources Authority (NEWRA) has been envisaged with the objective of providing effective flood control, generating electricity, providing irrigation facilities and developing infrastructure. MOWR has prepared a proposal for NEWRA in line with TVA and DVC in consultation with the States. However, Government of Arunachal Pradesh has certain reservations with regard to its constitution. A consensus amongst the North Eastern States has to be developed on utilizing the hydropower potential of Arunachal Pradesh and the integrated development of the region through the setting up of NEWRA.

Regional cooperation is essential between 'downstream' countries like India and Bangladesh with 'headwater' countries like China and Bhutan for developing flood management and irrigation projects and getting sufficient flow in the lean season. The Brahmaputra and the Barak rivers being international rivers of immense size, a huge resource base and high hazard potential, only effective cooperation and coordination among the basin countries (China, Bhutan, India and Bangladesh) can assure successful planning, management and utilization of the water resources in this region.



Chapter 5

INDUSTRY





# Chapter 5

## Industry

This chapter analyses the prevailing situation and future potential for industrial activities in NER. Industrial activities are discussed as manufacturing and non-farm activities in order to distinguish between (i) urban and rural activities and (ii) organized and unorganized industrial activities. Non-farm activities in rural and unorganized sectors should play an important role in increasing incomes of the rural population, particularly during the transition from primary and agricultural activities to organized manufacturing. It is in this phase that untrained agricultural farmers can find employment opportunities in handicraft and handloom production within the textile sector and various food processing rural activities like bee keeping, fishery, piggeries and poultry farming. These are not merely value added activities; they also provide enormous opportunities for on-the-job training and skill formation and innovation. However, for these activities to take off within the rural set up a number of initiatives are necessary.

### 5.1 The Manufacturing Sector

Economic growth is invariably associated with rapid structural change in the economy. One of the main features of the growth process is structural change to increase the relative importance of the manufacturing sector and a relative decline in primary and agricultural production (Kubo et al, 1998). This is a feature witnessed in a number of countries including India (Barua and Bandyopadhyay, 2005). Besides, as over 80 per cent of the population of the region depends on agriculture for livelihood, transfer of labour from agriculture to manufacturing and tertiary activities is a necessity from the viewpoint of improving the living standards of these people and also for enhancing agricultural productivity. This structural shift along the development path is often termed as the structural transformation of an economy. In short, it means a perpetual rise of the share of manufacturing and non-farm outputs in the gross domestic product over time.

Unfortunately, the share of manufacturing in the GDP of NER was only 4.71 per cent in 1993-94 compared to the national average (17 per cent) (Table 5.1A in Annexure 5.1). Further, the share decreased over time from 1993-94 to 2002-03. The share, however, varies across the States. It ranged from 3 per cent in Nagaland, Arunachal Pradesh, Meghalaya and Tripura to 8 per cent in Assam 1993-94. Thus, the pattern of industrial development of NER has not been in conformity with the standard historical trend even with respect to India. That is, industrialization has failed to take off in the region. This failure to achieve a significant increase in the share of manufacturing in GDP has reflected in the poor growth rates both in GDP and per capita GDP in NER.

### 5.2 The Performance of Manufacturing: Large and Small Industries

The growth performance of the manufacturing sector in the three States of Manipur, Tripura and Meghalaya, has been better than the national average (Table 5.2A in Annexure 5.1). However, the growth performance of the manufacturing sector in the remaining States of the region has been poor. In Arunachal Pradesh manufacturing sector has been virtually stagnant. The poor performance of the manufacturing sector seems to be one of the prime causes of the relatively poor performance of GDP growth of the region.



The manufacturing sector can be divided into registered and unregistered sectors. The unregistered sector generally comprises small-scale industries including handicrafts. Assam is by far the largest industrialized State in the region comprising nearly 88 per cent of the total industrial units in the region (Table 5.3A, Annexure 5.1). Nearly 90 per cent of the industrial output of the registered manufacturing sector originates in Assam while Arunachal Pradesh has no registered manufacturing industry.

Another important observation that could be made is that the unregistered sector is relatively evenly distributed across all the States in NER. This means that the States of the NER have certain distinctive strengths and advantages in handicrafts and other small-scale industries. Assam has the largest share in the unorganized sector followed by Manipur. It is evident therefore that the small-scale industries could not play any significant role in the development of NER.

### 5.2.1 Large Industries

There is very little large-scale manufacturing activity in the region (Table 5.4A, Annexure 5.1). The total number of large factories in the region is merely 1.56 per cent of the total large scale factories in India. Considering industrial employment and capital formation in the region it can be concluded that the large scale manufacturing sector in NER is virtually non-existent. The industries are mainly mining and quarrying, food processing, spinning and weaving, pulp and paper, wine and malt, bidi, cigars and cigarettes, printing, bleaching and dyeing, wool spinning, wooden products, foot wears, fertilizers and chemicals, insulated wires and cables and drugs and medicines (Table 5.18A in Annexure 5.1). The manufacturing activities are based on locally available resources for which the optimal plant sizes are not very large. Industries requiring large scale production such as petrochemicals, cement, steel and sugar are completely absent despite the fact that the region has the sources of basic raw materials required for the production of such goods. For example, there is abundance of limestone (in Meghalaya and Assam) but there is not a single cement factory in the region. Assam has the largest oil reserves (non-offshore) but the State has no large manufacturing unit of petrochemical products. On the other hand, we also observe some industries like insulated wires and cables coming up in the region although the region has no known reserves of copper.

Assam is the industrial 'hub' of the region. It alone has 88 per cent of the factories in the region which provide 86 per cent of the employment and generate 90 per cent of the output in the region. Next to Assam is Tripura in terms of the number of industrial activities. Interestingly, Tripura does not have a single rubber plant despite being the second largest producer of natural rubber in the country.

The main locational factors determining industrial establishments in Assam and Tripura are their relatively large size and higher population density. However, there are also other equally important factors like greater availability of skilled labour and power supply and also the fact that Assam has relatively better transport connectivity. It is the junction point of major road and railway networks linking the other States of the region with the rest of India.

In responding to the need for rapid industrialization of the North Eastern Region, the Government of India (GoI) had introduced the North East Industrial Policy (NEIP), 1997 which

offered a slew of fiscal incentives and subsidies to industry for a period of ten years. While NEIP, 1997 was able to attract large investments in cement (Meghalaya and Assam), ferroalloys and steel (Meghalaya) and coal and coke (Assam), it hardly had any impact in the other States. Even small ticket investments, which were mostly for facilities in the last stages of the value chain like only packaging of finished products mainly to benefit from excise duty refunds, were made in Assam and Meghalaya.


The main factors attracting industry into these two States are their relatively better industrial infrastructure as compared to the other States of the region. Assam's location at the juncture of NER States enables industries to be connected through the major road and railway networks with the rest of India. Locating industries at the junction minimizes distribution costs to other NER States. Meghalaya's large deposits of limestone and coal and till recently the availability of power also attracted investments.

With a view to bringing industrial investments to the other States as well, GoI announced the North East Industrial and Investment Promotion Policy (NEIIPP), 2007, for a period of another ten years, offering even more attractive fiscal incentives and subsidies and now covering the service sector also. This policy came into effect from April 1 2007. The main features of this policy are:

- (i) Sikkim included under NEIIPP, 2007 and the 'New Industrial Policy and other concessions for the State of Sikkim' announced earlier in December, 2002 discontinued from 1.4.2007.
- (ii) Under NEIIPP, 2007, all new units as well as existing units which go in for substantial expansion, unless otherwise specified and which commence commercial production within the 10 year period from the date of notification of NEIIPP, 2007 will be eligible for incentives for a period of 10 years from the date of commencement of commercial production.
- (iii) The incentives under NEIIPP, 2007 will be available to all industrial units, new as well as existing on their substantial expansion, located anywhere in the North Eastern Region. Consequently, the distinction between 'thrust' and 'non thrust' industries made in North East Industrial Policy (NEIP, 1997) will be discontinued from 1.4.2007.
- (iv) Under NEIIPP, 2007 incentives on substantial expansion will be given to units effecting 'an increase by not less than 25 per cent in the value of fixed capital investment in plant and machinery for the purpose of expansion of capacity/modernization and diversification' as against an increase by 33 ½ per cent which was prescribed in North East Industrial Policy, 1997.
- (v) Under NEIIPP, 2007, 100 per cent excise duty exemption will be continued on finished products made in the North Eastern Region, as was available under NEIP, 1997. However, in cases, where the CENVAT paid on the raw materials and intermediate products going into the production of finished products (other than the products which are otherwise exempt or subject to nil rate of duty) is higher than the excise duties payable on the finished products, ways and means to refund such overflow of CENVAT credit will be separately notified by the Ministry of Finance.





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- (vi) 100 per cent income tax exemption will continue under NEIIPP, 2007 as was available under NEIP, 1997.
  - (vii) Capital investment subsidy will be enhanced from 15 per cent of the investment in plant and machinery to 30 per cent and the limit for automatic approval of subsidy at this rate will be Rs. 1.5 crore per unit as against Rs. 30 lakh as was available under NEIP, 1997. Such subsidy will be applicable to units in the private sector, joint sector, cooperative sector as well as the units set up by the State Governments of the North Eastern Region. For grant of capital investment subsidy higher than Rs. 1.5 crore but upto a maximum of Rs.30 crore, there will be an Empowered Committee. Proposals which are eligible for a subsidy higher than Rs. 30 crore, will be placed by Department of Industrial Policy & Promotion before the Union Cabinet for its approval.
  - (viii) Interest subsidy will be made available @ 3 per cent on working capital loan under NEIIPP, 2007 as was available under NEIP, 1997.
  - (ix) Under NEIIPP, 2007, new industrial units as well as the existing units on their substantial expansion will be eligible for reimbursement of 100 per cent insurance premium under the Comprehensive Insurance Scheme.
  - (x) The industries which will not be eligible for benefit under NEIIPP, 2007 will include tobacco and tobacco products, paan masala, plastic carry bags of less than 20 microns and goods produced by refineries.
  - (xi) To provide incentives to the service sector including hotels and resorts, bio-technology and power plants upto 10 MW capacity.
  - (xii) In order to ensure genuine industrial activities in the North Eastern Region, benefits under NEIIPP, 2007 will **not** be admissible to goods in respect of which only peripheral activities like preservation during storage, cleaning operations, packing, re-packing, labelling or re-labelling, sorting, alteration of retail sale price etc. take place.
  - (xiii) To continue North Eastern Development Finance Corporation Ltd. (NEDFi) as the nodal agency for disbursement of subsidies under NEIIPP, 2007.

The provisions of NEIIPP, 2007 would provide requisite incentives as well as an enabling environment to speed up the industrialization of NER.

However, it would be imperative for the States to improve their industrial infrastructure if any large investments are to be attracted. Notwithstanding all this, the manufacturing sector in the North Eastern Region is looking up. A GAIL (India) Ltd. led consortium has started work on the Assam Gas Cracker Project, an integrated Petrochemical Complex. The project is expected to give rise to substantial investments in downstream plastic processing industries. It has been estimated that about 500 plastic processing industries can come up in the North Eastern Region when this project becomes operational (scheduled by 2012).

Moreover, with GoI re-dedicating itself to improving NER's infrastructure, business climate

and international linkages—like the Kaladan Multi Modal Transit Transport Project, connecting NER with Sittwe Port in Myanmar—promises large dividends for economic development of the region in the next few decades.

While international trade would be inevitable for the economic growth of a region, which shares 96 per cent of its boundaries with four other countries, greater integration among the States of the region would have many advantages for industrialization (see Box 5.1). A major constraint to this kind of cooperation among States is the absence of a good transport network connecting the States and production centres within a State to a large collection centre, which is necessary to guarantee an adequate and reliable supply of raw materials to industry.

It is often assumed that inducements in the nature of subsidies and incentives alone help industries overcome constraints that are otherwise a hindrance in their setting up. The jury is still out on whether offering unsustainable tax sops and fiscal incentives really promote industrial growth. Market failures and the lack of adequate infrastructure are probably bigger constraints to the vertical integration of industry. Without a proper industrialization strategy for the region and some inter-Governmental planning, the market cannot play its role in facilitating integration, which crucially depends on a well-developed transport network, free mobility of goods and services across the State and security of life and property.

#### **Box 5.1 Constraints in the Hills**

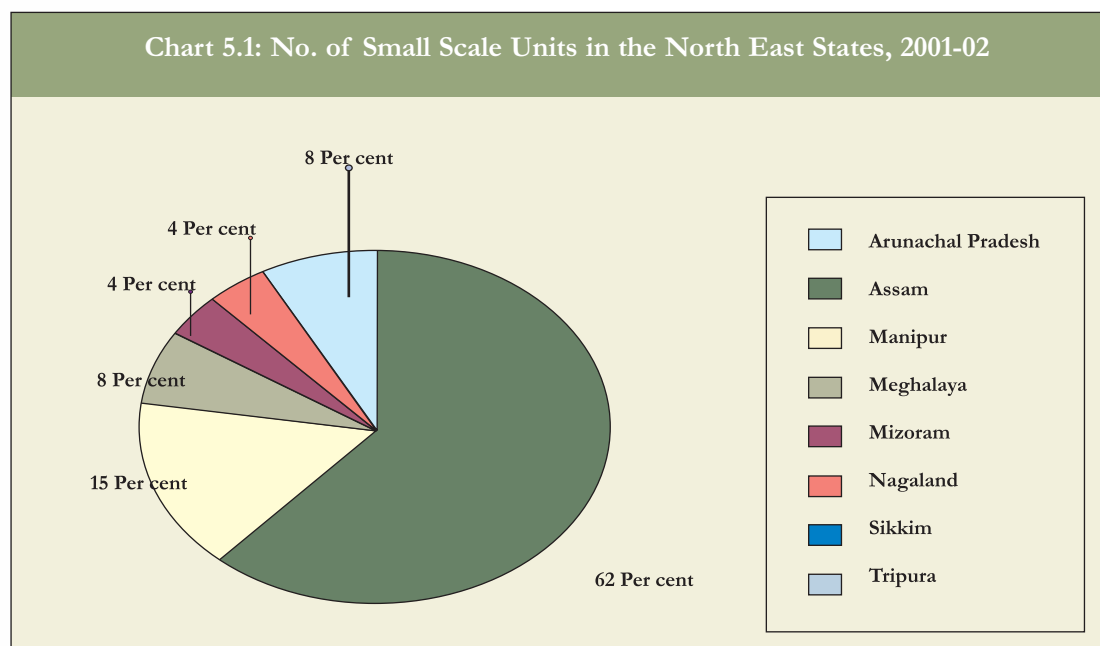
The hill States of the region are not well-integrated with the industrial clusters. They face problems of small markets as well as a lack of adequate supply of labour, even as large quantities of raw material for the agro-processing industry are grown here. Land is also a problem since most land in the hills is under community ownership. Nevertheless, it is possible to link the hill regions within the industrial network through a vertically integrated process. The hill States produce a wide variety of fruits and vegetables and various forest goods which provide scope for vertical specialization. In the fruit-processing industry, activities such as extraction of juice or slicing of the fruit (say, pineapple) can be done close to the fruit-growing areas, and further processing, bottling and packaging can be carried out in an industrial hub, which would significantly reduce transportation costs. Another example in Tripura which is one of the largest producers of natural rubber in the country. It is possible to undertake initial processing in Tripura to reduce transportation costs, while the conversion of rubber into various products could be undertaken at places close to the distribution network. The lack of an efficient transport network to connect the production point to the large collection centre in the markets is the key problem. But more importantly, market failures and lack of sufficient inducement to invest are perhaps bigger stumbling blocks for vertical specialization to take place. Without a proper industrialization strategy for the region and some inter-Governmental planning, the market by itself will not produce the desired result. Given a well-developed transport network, free mobility of goods and services across the State and guarantees for proper security of life and property of the people, the market will be able to create an environment for industrialization.



## 5.2.2 Small Industries

The relatively high labour-intensity of Small and Medium Enterprises (SMEs) gives it a crucial role in reducing poverty and unemployment. For the Indian economy this sector has contributed significantly to the growth of GDP, export and employment generation. During the last five decades it has acquired a prominent place in the socio-economic development of the country.

However, only 3 per cent of the small-scale units in the country (Table 5.5A in Annexure 5.1) are located in the North East of which, more than 60 per cent are in Assam (Chart 5.1). Sikkim is the State with the least number of SME units. The growth of SMEs has been by far the highest in Nagaland (28 per cent) followed by Meghalaya (8 per cent), Assam (6 per cent) and Mizoram (6 per cent) (Table 5.6A in Annexure 5.1).



Source: Third Census SME sector

Distinguishing the SME sector into SMEs, ancillaries and SSSBEs, it can be seen that the ancillary<sup>1</sup> units take the largest share followed by the SMEs and SSSBEs<sup>2</sup> (Table 5.8A in Annexure 5.1). Nagaland has the highest share of ancillary units while most of the SME units are located in Assam. The presence of SSSBEs is very marginal in NER-less than 3 per cent of the total. The presence of total SME in Arunachal Pradesh and Sikkim is negligible. As far as the gross output is concerned, it is just 1.78 per cent of the total gross output of India from this sector. The contribution

<sup>1</sup> An industrial undertaking which is engaged in the manufacture or production of parts, components, sub-assemblies, tooling or intermediates, or the rendering of services and the undertaking supplies or renders or proposes to supply or render not less than 50 per cent of its production or services and whose investment in fixed assets in plant and machinery does not exceed Rs 10 million.

<sup>2</sup> Service/ business enterprises with investment up to Rs 500,000 in fixed assets, excluding land and building, are called Small Scale Service/ Business Enterprises (SSSBEs).

of Assam (Table 5.9A in Annexure 5.1) is the highest in NER. The employment in the registered SME factory sector is also very negligible in NER. It is just 3.11 per cent of the total registered SME employment in India. Assam constitutes more than half of the NER's share in the registered SME sector employment. After Assam the per cent of SME employment is more in Manipur, which is 0.55 per cent of the total SME sector employment in India. It can be observed that the investment in the SME sector in NER is also very marginal (Table 5.10A in Annexure 5.1). As per the Third Census, fixed investment in NER was less than 2 per cent of the national level. As per the Third Census, around 2 per cent of the total sick units in the country existed in the NER. Assam had the highest share of sick units, followed by Manipur and Tripura (Table 5.11A in Annexure 5.1).

### *5.2.2.1 Small Scale Sector: Rural and Urban Division*

A sector-wise analysis of SME units shows that the SME sector is, in general (except in the case of Nagaland), dominated by manufacturing based units. Tripura is the only State having a strong presence in services, which is more than 50 per cent of the State's total number of SME units. Repair and maintenance related units are very marginal in NER except for Arunachal Pradesh and Assam. The rural-urban break up reveals that a relatively larger number of the SME manufacturing units are located in the rural areas of Assam, Nagaland, Manipur, Meghalaya and Sikkim (Table 5.7A in Annexure 5.1) However, it is the opposite in the case of Tripura, Arunachal Pradesh and Mizoram. The general trend for India suggests that SME units are found mostly in the rural areas. However, in case of the repair and maintenance sector it can be observed that most of these activities are located in the urban areas. The same is also the case for the services sector although in case of Mizoram and Assam service activities are mainly located in the rural areas.

### *5.2.2.2 Exports from the NER: SME Sector*

NER has 108 registered and 2,252 un-registered SME exporting units, which is 4.38 per cent of the total exporting units in India (Table 5.12A in Annexure 5.1). Most of the exporting SME units are operating in Assam followed by Nagaland. But the number of registered SME exporting units is more in Sikkim. In value terms, the value of exports in the SME sector from NER is negligible, at less than 1 per cent of the total export value (Table 5.13A in Annexure 5.1). One important point to be noted is that 4.38 per cent of the exporting units contribute only 0.23 per cent in export value in the country. The major export items are tea, bamboo products, silk and fabric products, handicraft and handloom products.

## **5.3 Khadi and Village Industries in North Eastern Region**

Khadi and Village Industries have the unique capacity to generate large employment opportunities in rural areas at a low capital cost and have therefore occupied an important place in the national economy. These industries have developed local initiatives, cooperation and spirit of self-reliance in the economy and at the same time helped in utilizing the available man-power in rural areas for processing locally available raw materials by adoption of simple techniques.

Khadi and Village Industries are being implemented in NER including Sikkim, especially under the Rural Employment Generation Programme (REGP) for village industries. REGP is the



flagship programme of KVIC/Ministry of MSME which was implemented in NER. This scheme was implemented by KVIC through its State offices established in State capitals as well as through the Khadi and Village Industries Boards which are State Government agencies located in each State capital.

Since, banks are not spread out in the villages and banks are the sanctioning authority for REGP projects, the scheme could not penetrate in the hilly villages during the early stages. However, the State Khadi and Village Industry Boards played a vital role in its implementation and so the progress of REGP has picked up.

As per directives of the Government of India, 10 per cent of the total budget has been earmarked to this region by KVIC out of REGP grant every year. Under Backward & Forward Linkages, a special package with higher rate of funds has been provided every year to NER.

As per the 2001 Census, the rural population of NER to the country's rural population was 4.41 per cent. The percentage of Scheduled Caste population in NER to the country's total Scheduled Caste population was 1.60 per cent and that of Scheduled Tribes was 11.89 per cent. Similarly, the percentage of population of rural women in NER to the country's total rural women population was 4.41 per cent. In view of this, emphasis was given to the generating of rural employment through REGP scheme NER for SCs/STs and women entrepreneurs in particular.

### **Progress of Rural Employment Generation Programme (REGP) in NER:**

#### **1.Target and Achievement during Tenth Five Year Plan period.**

Details	No. of Projects	Margin Money (Rs. Crore)	Employment (Lakh Persons)
Target	16179	161.72	3.03
Achievement	12879	138.10	2.47
Achievement %	80%	85%	82%

#### **2.Target and Achievement during 2006-07:**

Details	No. of Projects	Margin Money (Rs. Crore)	Employment (Lakh Persons)
Target	3476	40.12	0.65
Achievement	3438	39.11	0.65
Achievement %	99%	97%	100%

#### **3.Comparative Statement of Performance upto February during 2006-07 and 2007-08.**

Details	2006-07	2007-08	Percentage increase
No. of Projects	2285	3348	47%
M.M. (Rs. Crore)	24.87	37.88	52%
Employment (Lakh Persons)	0.40	0.57	43%



#### 4.Target and achievement 2007-08 (April'07 to February'08)

Details	Target for 2007-08	Achievement (April to Jan.'08)	Achievement %
No. of Projects	4100	3348	82%
M.M. (Rs. Crore)	46.83	37.88	81%
Employment (Lakh Persons)	0.78	0.57	73%

#### 5.Social Category Projects Achievement % During 2007-08 (upto February'08).

Category	Target %	Achievement %
Scheduled Caste	15	9.62
Scheduled Tribes	7.5	41.22
Other Backward Classed	27	17.77
Physically Handicapped	3	0.21
Ex-Servicemen	1	0.24
Minorities	5	10.45
General	41.5	20.49
TOTAL	100	100
Women	30% of total target	24.52

#### 6.Projections for the Eleventh Five Year Plan in N.E. Region:

Year	Employment (in lakh persons)	Margin Money (Rs.in crore)	Backward/Forward Linkage (7.5% of Margin Money) (Rs. in crore)
2007-08	0.63	47.28	3.55
2008-09	0.68	51.00	3.83
2009-10	0.74	55.01	4.13
2010-11	0.80	59.40	4.46
2011-12	0.86	64.16	4.81
TOTAL	3.71	276.85	20.78

Looking at the success of the REGP programme, the Ministry of MSME, Government of India is merging the PMRY scheme with KVICs REGP scheme and forming a new scheme 'Prime Minister's Employment Generation Programme' which may be launched during May-June, 2008 in the country including in NER. Under the new PMEGP scheme also special emphasis will be given for to NER.

#### Initiatives taken:

- KVIC has signed an MoU with Nehru Yuva Kendra Sanghathan (NYKS) for organizing awareness camps involving rural youth for the REGP scheme for generation of self-employment.



- Another MoU has been signed with Ministry of Women & Child Development for propagating REGP to Self-Help Groups on women in rural areas in the country including in NER.
- Convergence established with State/SC/ST/Minority Finance and Development Corporations to involve SC/ST/minority youths in the REGP scheme.

#### **Areas for Capacity Building:**

1. Setting up of Multi-Disciplinary Training Centres (MDTCs).
2. Setting up of Khadi Gramodyog Bhavans/Bhandars to sell KVI products.
3. Capacity building for existing KVI institutions in the region.
4. Mass-publicity support for promoting the KVIC scheme and marketing of KVI products.

## **5.4 The Way Forward for Industries**

Industry will play an important role in absorbing surplus labour from land, once farming moves to cash-crop cultivation. For this, the region will develop industry based on the resources available in the region. The focus of the industrial policy in the region needs to shift from supply-related inducements to industry (tax incentives and so on) to creating preconditions that will give rise to market forces, which will automatically encourage industrial activity.

### **Box 5.2 Tea Industry in NER**

The tea industry plays an important role in the economic activity in NER. The tea industry in NER is the world's largest tea growing region having 16 per cent shares, and is the largest producer and exporter of tea in India (with a share of 55 per cent) (NEC Data Bank). During the last five years the average annual production of tea in NER was around 840 million kg. (Table 5.14A in Annexure 5.1). The region exports a significant amount of tea though over the years exports have been declining. But there is huge scope for the growth of the tea processing industry in the region. So steps should be taken to encourage tea processing industry in the region.

### **5.4.1 Synchronization of State Industrial Policies**

Realizing this vision will call for synchronization of State industrial policies, taking into account conditions and systems in other States.<sup>3</sup> A common industrial policy framework for the region at this juncture would be premature, for, NER has not yet evolved into a meaningful economic and administrative entity. However, it is important that State policies are formulated so that they are efficient and optimal from the point of view of the region as a whole. For example, it would not be efficient for every State to have a cement industry if the optimal size dictates only one plant in the region. While location of a plant and the promotion of vertical or horizontal specialization

<sup>3</sup>The current state industrial policies and common industrial policy for NER lack synchronization in policies among all the states (see Annexure 5.2).

within an industry are ideally determined by market forces, in the absence of functioning markets, some Government intervention will be needed through a synchronization of policies among States.

Further, policy needs to shift its focus from providing incentives (such as easy credit facilities, tax holidays, export promotion parks and capital investment subsidies) to easing infrastructural and fundamental bottlenecks to production and marketing. State-specific policies have failed to have a significant effect on industry because they are oriented towards increasing supply in the region. The real problem is the lack of 'effective demand' from the people, which enables industry to produce on a profitable scale. Therefore, incentives have not given rise to an upsurge in entrepreneurial activities or inflows of private capita, as demand for the product within the State is insufficient to reap minimum profits. Moreover, marketing networks are almost non-existent.

### **5.4.2 A Cluster-based Approach to Industry**

Manufacturing enjoys economies of scale, so a large home market is necessary for the growth of manufacturing activities in a region. The clustering effect is crucial for manufacturing as this gives rise to various forms of 'externalities'. For example, each processing unit of an industry provides a market for another industry; the cluster formation also encourages the creation of a pool of skilled labour. In fact, the absence of such clusters is a prime cause of high labour costs in the region. Development of existing skills in the traditional craft pockets in rural areas and marketing linkages will provide not only employment opportunities but there will also be socio-economic development. Development of handlooms, handicrafts and sericulture with a cluster approach is appropriate for the region.

However, there is a lot of scope for the development of industries based on local raw materials. This will call for a very well-developed transport network in the region. The poor inter and intra-State connectivity has worked against the formation of such industrial clusters. Other factors that need to be taken care of are ensuring an adequate supply of power, a skilled labour force and risk-bearing loanable funds.

### **5.4.3 Promoting Vertical Integration of Industrial Production Between the Hills and Plains**

Vertically integrating the hill States with the industrial hub in the plains would promote a degree of industrialization in these States. The wide variety of fruits, vegetables and forest goods produced by the hill States offers excellent potential for vertical integration with processing units located in the plains. For example, fruit processing industry could be set up based on fruit (say, pineapples) produced in large quantities in Nagaland and Meghalaya. The initial raw material processing, such as juice extraction or slicing would be more economically located near the source, since initial processing reduces bulk and consequently transport costs. The next stages of processing such as bottling, packaging and marketing, which are highly labour-intensive could be located in the industrial 'hub.'

Similarly, the initial stages of rubber processing could be done in Tripura (the second largest producer of rubber in the country), while the manufacture of various rubber products could be located near the distribution network.



#### 5.4.4 Creating an Investment Climate

Market development will require Government intervention. Ensuring free mobility of goods and services in the region requires speedy connectivity (by road, train, air and inland waterways) within as well as between States and efficient modes of communication including-internet and broadband connectivity and an efficient mobile network.

An important issue in the northeast relates to the security of life and property. Lack of proper law-enforcing mechanisms within a State may cause market failures or in other words prevent the emergence of markets. This calls for a joint-security management approach developed by all the States together, rather than the present disjointed-security systems.

##### Box 5.3 Land as a Constraining Factor for Industrialization

The large-scale community ownership of land in many hill States has hampered the emergence of a market-based economy in these areas. In Meghalaya, for example, the Government owns a miniscule 4 per cent of the land (Sreerajan, 2001); in Manipur, private lands are better developed than those owned by the Government (Sachdeva, 2005). Thus, while industrial policy resolutions in these States propose leasing lands for setting up industry, the non-availability of individually owned land remains a major hurdle to industrialization. The draft report of the steering committee on the North Eastern Region for the Eleventh Five Year Plan (2008-12) also recognizes the need for the simplification of land laws. The Eleventh Plan document also recognizes that, due to absence of well defined land ownership in the region the banks are not able to provide industrial loans.<sup>4</sup> The States have followed different paths in dealing with this issue depending on the constitutional rights accorded to their respective communities: In Meghalaya, for example, the State can take over land for developmental purposes if it is 'tribal interest.' State Governments have to clearly spell out the different ways in which entrepreneurs and enterprises can safely and legally acquire land for industrial activity.

The development of markets in the region will also call for greater transparencies in resource-sharing policies including land. Restrictive land laws and common property rights in many States in the region have deterred investors from the region (See Box 5.3).<sup>5</sup> Other pre-requisites for the emergence of markets are enhancement of banking and other financial intermediaries in the States, and the provision of adequate good quality power to industries.

#### 5.4.5 Industry Based on Local Resources: Adding Value within the Region

As mentioned earlier, the geo-political structure of the region suggests that industrial development be based on locally available resources such as natural gas and petrochemicals, bamboo, natural rubber, tea and horticultural products. A people-centric strategy for development would be

<sup>4</sup>Institutional finance, especially bank loans, play a crucial role in the development of industry. The role of institutional finance becomes more prominent as the amount of fund that is being sanctioned by the NEC is very low (see 2006-08 Plan outlay for NER, Eleventh Plan Document).

<sup>5</sup>The State Industrial Policy resolutions of various States are silent on the issues of land.

to add as much value to these resources within the region, rather than marketing the raw material to the rest of the country. This would create more jobs and enhance income-generation, in addition to promoting industrialization within the region.

A planned exploitation of agriculture and allied sectors such as tea, bamboo, sericulture, jute diversified products, floriculture and herbal and medicinal plants could provide the necessary boost to manufacturing and self-employment (see Boxes 5.2 and 5.4). For example, the tea industry plays an important role in the economic activities NER. NER is the world's largest tea-growing region (with a 16 per cent share), and the largest producer and exporter of tea in India (with a share of 55 per cent) (NEC Databank). Over the years, the value of tea exports has been declining; the focus could be to process tea within the region.

Natural gas is one of the main resources available in the NER. For rapid industrialization and generation of employment, it is necessary to step up exploration by the Oil and Natural Gas Corporation (ONGC) and GAIL (India) Ltd. At the same time, a long-term policy is required for ensuring supply of an assured quantity of gas at a concessional rate so that available gas can be used in meaningful manner.

It would be prudent to focus on those products that would reduce dependence on imports from outside NER and provide competitive advantage in exports out of NER. It would be very helpful for the small manufacturers to grow with the help of captive markets. Steps should be taken to provide necessary supplies to large captive markets like the army. Small manufacturers can supply necessary manufacturing, food and beverage products to the huge demand due to the presence of a strong army base in the region.

#### 5.4.6 Tapping the Employment Potential of Small-scale Industry

Small industries dominate the industrial scenario in NER and special efforts need to be made for their expansion and growth. In the short run, the productivity of existing small industries can be raised by improving physical infrastructure and efficiency of the units. The distinctive advantages that the region has in handloom, handicraft and sericulture should be exploited and these areas promoted as they provide jobs for a sizeable proportion of the labour force and have tremendous export potential (see Box 5.4).

##### **Box 5.4 Bamboo-Based Industrial Activity**

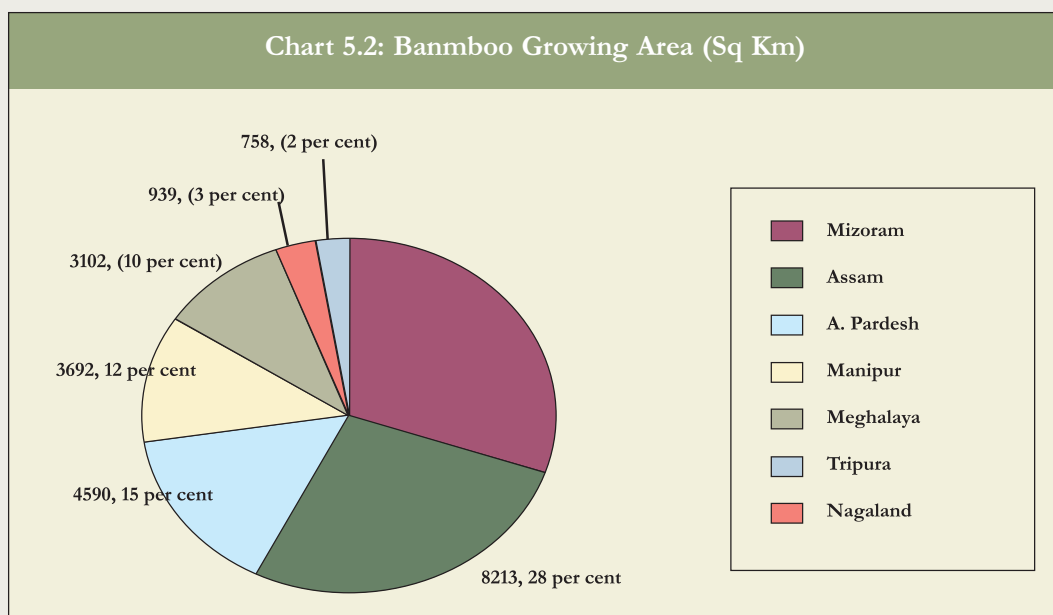
Bamboo is an integral part of the socio-cultural and economic traditions of the region. It plays an important role in shaping the economies of the NE by providing huge employment opportunities. Around 50 per cent of the country's bamboo resources are in the NE States, 14 per cent of which are in Mizoram where bamboo forests cover almost half the geographical area of the State (Chart 5.2; Table 5.17A in Annexure 5.1). Assam has the most bamboo stock followed by Manipur, Mizoram and Arunachal Pradesh.







Chart 5.2: Bamboo Growing Area (Sq Km)



There is plenty of scope for bamboo production, as the current level of output is far less than national demand, estimated at 28 million tons.

The productivity of bamboo could profitably be increased. In addition to its traditional applications in building and reconstruction material, cottage and tiny industries, as food and medicinal products, and handicrafts the demand for bamboo has increased in new-generation products like wood substitutes, for activated carbon and charcoal, and in the production of energy through gasifiers. At the moment production is hampered by the absence of scientific methods for propagation and cultivation, lack of post-harvest treatment and technology for product development, the lack of trained manpower and infrastructure for large-scale harvesting in the event of gregarious flowering.

Some of these drawbacks will be addressed through the National Mission on Bamboo Application (NMBA) which has started work on developing appropriate tools for primary and secondary processing, converting bamboo and bamboo waste into activated carbon, and other measures including setting up finance for bamboo development.

Sources: Jayant Madhab (2003); National Bamboo Mission, Ministry of Agriculture, Government of India; *The Bamboo Policy of Mizoram, 2002*.

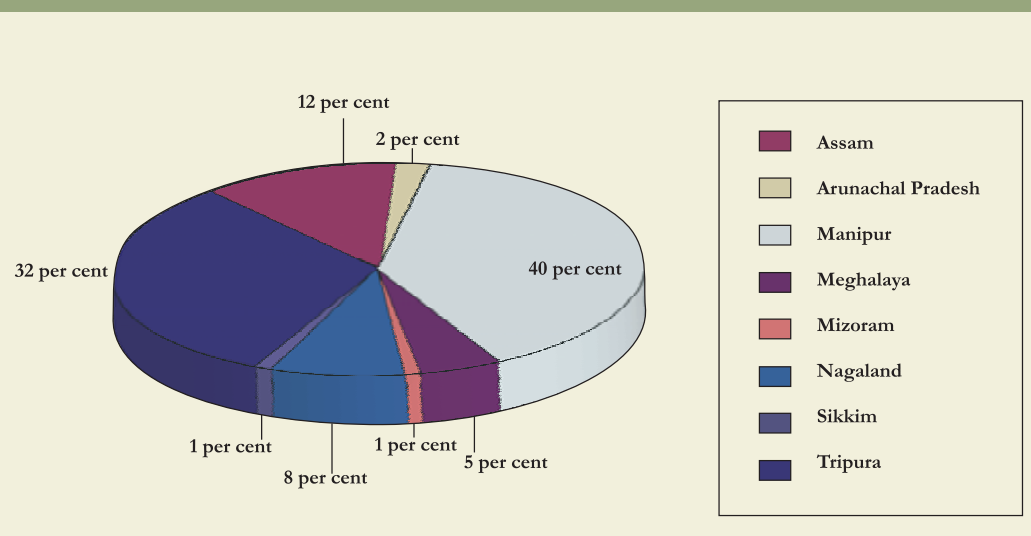
Efforts should be made to improve the export competitiveness of the exporting units in NER through technology upgradation and the use of skilled labour. This will raise the value of SME exports from the region (currently only 0.23 per cent, even though the number of exporting units constitutes around 4.38 per cent of the total in the country).



### Box 5.5 Handicrafts and Handlooms

Handicrafts is the most important industrial sector in NER; the region has approximately 20 per cent of the total number of handicraft units in the country and in value terms, it accounts for around 80 per cent of the total value of handicrafts being produced in India and provides employment to 22 per cent of the total number of artisans in the country (see Table 5.15A, Annexure 5.1). Manipur has the most craft units followed by Tripura (Chart 5.3) but in terms of value, Nagaland ranks the highest, followed by Assam.

Chart 5.3: Handicrafts in NER as Handloom Census, 1995-96



Source: NEC Data Bank, according to the Census of Handicrafts Conducted by NCAER during 1995-96.

## 5.5 The Way Forward

It must be realized that it is not an easy task but a very difficult one to be able to draw up a 'common industrialization strategy' for NER since all the States function in complete isolation. But there is no need for a 'common industrialization policy' since well-functioning markets shall do this job. But for well-functioning markets certain minimum preconditions need to be satisfied for which Governmental intervention is absolutely necessary. It is not the job of a modern Government to dictate where to locate an industry; this should be left to the markets. The Governments must ensure the preconditions mentioned below for well-developed market forces to operate which will eventually give rise to the evolution of industries.

- Connectivity is the key. A special focus on robust telecom and IT infrastructure— bandwidth via broadband in towns and wireless is necessary. Community Information Centres and support structure for their sustenance are also central in developing a mission mode approach to producing more local content and applications. Policy initiatives can drive hubs for back office and call centre applications in the region.

- Ensuring safety and security in all the States for which ‘joint security management’ rather than the present ‘disjointed security systems’ in NER is of utmost necessity. All the States must work together to work out such a joint security arrangement.
- Fast and speedy connectivity (by road, train or by other possible means) within as well as between the States and efficient modes of communication are necessary before chalking out any industrialization strategy for the region.
- The policies and procedures of different States in the region need to be streamlined and harmonized to enable manufacturing units to access raw materials from all the States in the region to allow them economies of scale.
- The above two conditions would satisfy free mobility of goods and services between the States which is necessary for deciding any industrial activity by an entrepreneur.
- Enhancement of banking and other financial intermediaries in the States.
- Transparencies in resource sharing policies including land.
- Adequate supply of power for industries.
- Exemption of import duty for bamboo related technology.

## 5.6 The Long-Term Vision

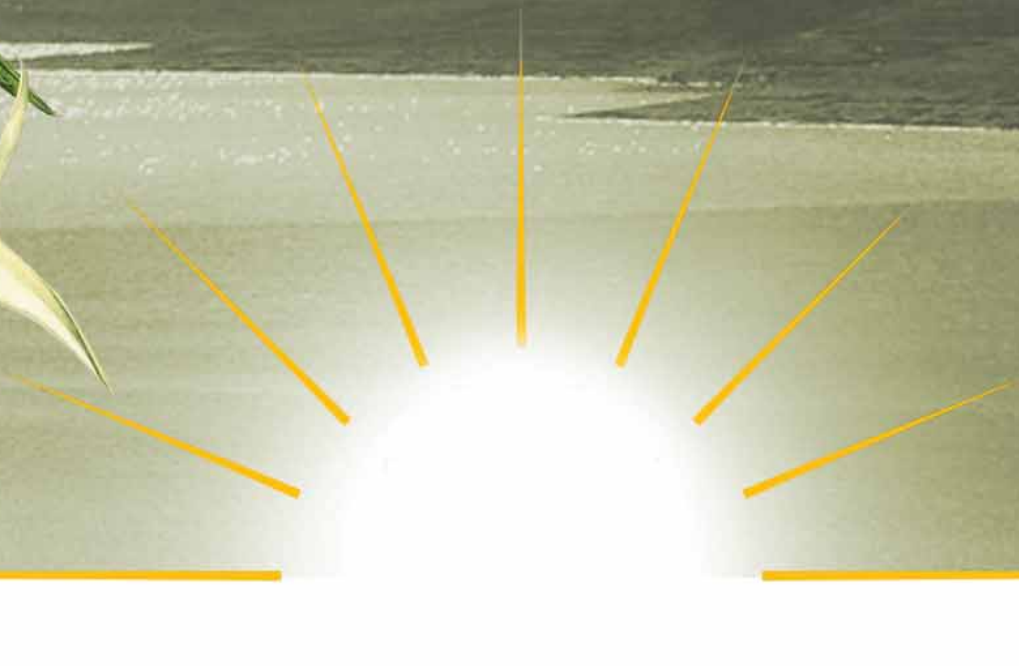
In the long term, the strategy for industrial development will address issues related to labour shortages, skill development and the development of physical infrastructure<sup>6</sup> (to increase connectivity and promote communication) which are major impediments to industrial growth. Drawing a ‘common industrialization strategy’ for NER will be a challenging task, but it is important that Governments, both Central and State, evolve a blueprint for a common market and common administrative and economic unit for the region.

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<sup>6</sup> The Eleventh Plan Approach Paper also recognizes the crucial role of physical infrastructure in industrial development in India. This is especially true for NER, which lags behind the rest of the country in terms of physical infrastructure.



Chapter 6  
**SERVICES**  
**BANKING TOURISM**  
**AND ITES**







## Chapter 6

### Services: Banking, Tourism and ITES

The emergence of a strong services sector is essential for a region's economic progress and prosperity. Expansion of a services sector along with growth in manufacturing will have to provide opportunities for the surplus labour in agriculture. The concomitant development of services is important to expand employment opportunities available to people displaced from land-based activities. The low land-intensity of services makes them ideal thrust areas for growth, especially in the hill States of the northeast region where land is at a premium. Already some of the hill States have very successfully expanded their tourism activities, and in the process generated employment and income both directly and indirectly. Finally, the modernization of agriculture proposed for NER depends on the emergence of a number of related services.

The services sector has doubled in real terms in its contribution to GDP in almost every State (Tables 6.1A and 6.2A in Annexure 6.1), the main areas of growth being trade, hotels and restaurants, and public administration, with real estate gaining importance in Assam, Nagaland and Meghalaya in recent years.<sup>1</sup> The growth in trade, hotels and restaurants and real estate indicates growing private sector activity.

The fastest growing sector has been public administration (except for Nagaland and Meghalaya), reflecting the common malaise that, outside agriculture, the Government has become the main employer in these States. Central grants maintained public expenditure in the States have had to expand to absorb a large number of that have the educated population. Over the years, poor infrastructure facilities coupled with insurgency have restricted the growth of other service sectors. Security considerations have also limited the extent to which expenditure on public administration can be reduced. The banking sector is virtually non-existent in most of these States, although some activity has emerged in Arunachal Pradesh, Assam, Meghalaya and Sikkim.

#### 6.1 Banking

It is fairly well known that NER has been deficient in the use of banking capital. One indicator of this is the credit-deposit ratio (CD) i.e., the ratio of credit extended by the banks to the deposits generated in any region. A low ratio indicates the lack of off-take of credit either because of lack of demand (due to low level of commercial activity) or low credit worthiness of borrowers (Table 6.3A in Annexure 6.1).

As is clear from Table 6.3A, in Annexure 6.1 CD has been consistently low in all NER States as compared to the all-India average. Furthermore, two States—Assam and Tripura—do not show any improvement in this ratio since the mid-1990s. Thus, while for Assam the CD ratio had been stagnant at about 33 per cent since 1996-98, Tripura witnessed a decline from 34 per cent in 1998-98 to 29 per cent in 2004-05. Second, the impact of insurgency in Manipur is obvious. In

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<sup>1</sup> 'Other services' have also emerged as important, but no breakdown for this category is available. This sector actually includes a number of services like education, (covered in another chapter), but it would be instructive to see the change in the relative importance of these components over time.



1996-98 it had the highest CD ratio of all the NER States at around 59 per cent but this declined to 41 per cent in 2004-05. Third, Meghalaya, Sikkim and Mizoram show significant increases between 1999-2000 and 2004-05 with the ratio almost tripling for Meghalaya and doubling for Sikkim and Mizoram. For Sikkim, in particular, the increased banking activity is quite visible.<sup>2</sup>

It would be instructive to look at the types of economic activities that generate demand for bank credit and other services. We have already seen in the chapter on agriculture that the agricultural sector is largely based on subsistence farming and little cash farming. This must have contributed to the low spread of credit and other banking activities among the farmers. (This is also seen in Table 6.4A in Annexure 6.1) which provides data on outstanding loans to farmers on a per capita basis. It can be seen from this table that outstanding advances to farmers (direct finance and total finance) is very small compared to the all-India average.<sup>3</sup>

The chapter on industrial sector also shows the lack of serious industrial activity in NER States. (This is reflected in Table 6.5A, in Annexure 6.1) which shows the loans outstanding to small scale industries, industrial estates and transport operators on a per capita basis.

In conclusion, it is clear that the low spread of banking services is directly related to the subsistence nature of the agricultural economy and the lack of other industrial economic activity. There is a need for more micro-finance organizations disbursing small loans.<sup>4</sup> Some beginning in this area seems to have been made with loans given by NEDFI to some NGOs which operate in the remote hill areas. The hill areas are also too far from the NEDFI office in Guwahati and the cost of servicing these loans is high both for NEDFI and for the loanee. Hence, particularly in the remote hill areas, the role of intermediaries like Non-Banking Financial Institutions (NBFIs) or NGOs in getting small loans to farmers and small-scale industries is crucial<sup>5</sup>

#### **Box 6.1 : Emerging Areas: A Case Study of the Music Industry in Nagaland**

The Government of Nagaland declared 2004-05 the Year of Youth Empowerment, and constituted a special task force for music in August, 2004. This team drew on the experiences of members, drawn from diverse professional backgrounds sharing a common passion for music, to suggest and formulate policies conducive for the promotion of music as an industry by the state government. A special cell was set up in the Department of Youth Resources and Sports, Nagaland in August 2006, to carry forward the agenda to integrate and promote activities that

<sup>2</sup> While in 2000-01 there were just a few public sector banks, recent field trips showed that almost all private banks have increased their presence significantly. In both Meghalaya and Sikkim field trips by the research team show significant tourist activity which usually drives banking networks.

<sup>3</sup> The chapter on NER in the Eleventh Plan document recommends that the problem of agricultural credit be overcome by revitalizing the cooperative credit structure and availing of NABARD credit.

<sup>4</sup> Field trips by the research team to NER also indicated that most farmers seem to need small loans (of Rs. 50,000 to 60,000) which scheduled banks are not able to administer given the cost of administering such loans. Discussion with the refinance bank for the region, NEDFI, also confirmed this as the officials indicated that small loans (for industrial or horticultural purposes) were too expensive for NEDFI to administer

<sup>5</sup> The land tenure system prevalent in most of the states in the region (except non-scheduled areas) restricting alienation of land from a tribal to non-tribal together with absence of personal ownership rights and commensurate land records makes it difficult for the banks to lend in the region. Important suggestions have been given by committees set up to analyse issues related to credit supply in NER. Suggestions include using social capital as alternative collateral and devising alternatives to land documents for extending small credits.

would spur the growth of interdependent professional skills that operate within, and on the fringes of the music industry.

A Centre of Excellence for Music and Performing Arts will be set up within the Science College Campus, *Jotsoma*, with impressive infrastructure including seminar halls for multi-disciplinary activities; a recording studio for audio-visual productions; an auditorium, library, archives and data bank so scholars can access information.

Capacity-building of Naga musicians has taken the form of exposure to performances in Delhi and other parts of the country, and training in vocal and instrumental music for the academic session 2008-08 at various institutes in Delhi, Bangalore and Kolkata (with the help of private individuals). The annual Hornbill Festival in Kohima has become an important event for local and foreign talent-spotting. The Roots Festival was held across NER in May 2008 which promoted intra-state interactions.


This has spurred the emergence of professional support activities, with recording houses such as the Aries Music and Sound Foundation, Dimapur; Studio 29, Dimapur; Clef Ensemble, Kohima and Highland Dawn Media, Kohima for audio visual productions, becoming very active in the state. The Dream Café, Kohima has become a hub for young people and promotes interactions with musicians and professionals from all walks of life. Music is poised to become a major industry in the state, growing from its current annual generation of Rs. 3.5 crore to Rs. 300 crore by 2020.

Source: From the Music Task Force for Nagaland



Minister Aiyar with Chief Minister and senior officials of Nagaland at a Musical Evening in Kohima





The Approach to the Eleventh Plan recommends that to stimulate private investment we must remove from its path policy-induced constraints and excessive transaction costs. Increasing the number of successful entrepreneurs requires the creation of a competitive environment which encourages new entrants and provides enough finance for efficient enterprises to expand. Competition also requires policies to curb restrictive practices, particularly those that deter entry, e.g., pre-emptive acquisition of property. To achieve such an environment it is imperative that the reforms agenda be pursued with vigour. Licensing controls and discretionary approvals have been greatly reduced but there are many remnants of the control regime that need drastic overhaul. Quantitative controls, where they exist, should give way to fiscal measures and increased reliance on competitive markets subject to appropriate, transparent and effective regulations. The burden of multiple inspections by Government agencies must be removed and tax regimes rationalized. A major component of the Eleventh Plan must be to design policies that spur private sector investment while encouraging competition by guarding against monopolistic practices. Continued commitment to the developmental and social roles of banking is important to ensure that the benefits are widespread.

One of India's strengths is that it has a financial system comprising commercial and cooperative banks, various types of non-bank financing organizations, capital market institutions and insurance and pension funds. Indian skills are evident in financial markets and institutions all over the world and the Indian financial system has evolved to meet many specific needs, improving considerably over the years with an expansion in depth and variety. The approach that has been followed thus far has included an increased role for private sector banks and foreign financial institutions in the domestic market, and a carefully calibrated opening of the economy to international capital markets. This has generally succeeded in ensuring systemic stability while also allowing financial development. As we gain confidence in systemic stability and as matters become clearer on oil prices, and the effect of these on the international economy, we can be more ambitious in encouraging new developments. It should be noted, however, that the degree of fiscal consolidation that is usually considered safe for capital account convertibility would, on current projections of revenues and non-plan expenditures, place constraints on providing budgetary support required for faster and more inclusive growth in the Eleventh Plan.

Access to financial resources enables the poor to exploit investment opportunities, reduces their vulnerability to shocks and promotes economic growth. But lack of credit at reasonable rates is a persistent problem, in large part reflecting the collapse of the cooperative credit system. The failure of the organized credit system in extending credit has led to excessive dependence on informal sources usually at exorbitant interest rates. This is at the root of farmer distress reflected in excessive indebtedness. There are of course some positive recent developments, for example, the acceptance of the Vaidyanathan Committee report on cooperatives by the Government and the success of commercial banks to almost double the flow of agricultural credit after 2003. Nonetheless, problems still loom large. Implementation of the Vaidyanathan Committee report has been slow because of the reluctance of States to cede control over cooperatives. Problems of the long-term credit structure have hardly been addressed and the large increase in commercial bank credit does not appear to have significantly improved access in either poorly banked regions or for small/marginal farmers and tenants. One of the important tasks of the Eleventh Plan would



be to review the position regarding the availability of timely and adequate credit (both term loan and working capital) to small and medium enterprises from commercial banks and other financial institutions and suggesting measures to eliminate the shortcomings that are noticed.

## 6.2 Recommendations of the Report of the Committee on Financial Sector Plan for NER<sup>6</sup>

The Committee stressed the need to improve infrastructure, create a favourable investment climate, focus on a few sectors of strategic advantage for development and encourage a favourable credit culture. It recommended that banks could draw up plans to provide at least 50 new households per branch each month for the next four years with a deposit account (with an option to the household of opening a 'no frills' account). Taking into account the balances maintained in such accounts over a period of time, the bank may offer small overdrafts or General Credit Cards (GCC) against such accounts and other products in terms of the extant Reserve Bank guidelines so that a banking habit is actively promoted in the region. If the branch has opened an account for a Self-Help Group (SHG), then the number of members of the SHG will be the number of households covered. Banks could introduce a pilot project in the rural and semi-urban areas closest to the bank branches by customizing simple deposit and credit products to suit the needs of households in these villages and then improve upon the product and extend it to other areas. A model application form including a form for attesting Know Your Customer (KYC) through simplified procedures has been suggested by the Committee. It had stressed the importance of adequate groundwork and creation of awareness amongst the clientele as also the bank staff and intermediaries before embarking on a large-scale financial inclusion programme. Currently, 50 per cent of the credit outstanding under GCC upto Rs. 25,000 will be eligible to be treated as indirect agriculture financing. In order to encourage the flow of credit through GCC, the Committee recommended that 100 per cent of advance under GCC at rural and semi-urban branches in the NER may be treated as a priority sector. The Committee drew attention to RBI guidelines for offering a one-time settlement up to Rs. 25,000 to existing borrowers with overdue loans, to enable them to get a fresh chance to access bank credit and maintain a good credit record in the future.


The Committee suggested an approach based on enhancing the capacities of the existing branches of commercial banks, Regional Rural Banks (RRBs) and cooperative banks having more recourse to bank-SHG linkage programmes, a business correspondent/business facilitator model as also extensive use of IT-based solutions which facilitate offsite banking. Taking the minimum branch needs into account, it identified 19 centres for specified banks to open branches by March 2008. The position may be reviewed in the State-Level Bankers' Committee (SLBC) to be held in the first quarter of 2008-08 to decide on further centres for branch expansion. The Reserve Bank's current branch licensing policy encourages banks to open branches in under-banked rural and semi-urban areas especially in under-banked districts. Taking into account the large number of such areas in the region, the Committee recommended that, for NER, RBI may consider an automatic approval scheme for any bank desirous of opening branches in such areas in the region. For other

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<sup>6</sup> Report of the Committee on Financial Sector Plan for North Eastern Region, RBI, July 2006.







areas in NER also, applications may be considered favourably. New branch proposals from RRBs can be cleared expeditiously by the Empowered Committee (EC) in terms of the instructions issued by the Reserve Bank on June 13, 2006. The RBI issued guidelines in January 2006 enabling banks to use registered societies, cooperatives, section 25 companies, trusts or post offices as business correspondents. In NER, considering the time, distance and cost for a customer to reach a bank branch, especially in remote areas, the Committee believed that banks can use this model effectively for increasing their outreach. Ideally, for NER, local community-based organizations (CBOs) like Village Development Boards (VDBs), Anchal Samitis, may be used as business correspondents. The State-level task forces have identified some organizations that could be used as business correspondents. Banks could also identify well-respected local persons like a schoolteacher, postman, primary health worker or retired official to act as business facilitators or relationship managers. These facilitators can handle all aspects of sourcing clients, marketing the bank's products and helping recovery but cannot undertake any cash transactions. While banks may pursue the well-proven intelligent interpretation of traditional concepts of credit assessment, credit utilization, asset verification, inspection, security etc., there is a need to upscale operations through SHGs, especially for providing working capital and investment credit. NABARD may review its guidelines for this purpose if required and also allow refinance for banks financing Micro-Finance Institutions (MFIs) in NER. A part of the micro-finance equity fund of NABARD may be specifically earmarked and utilized for NER. The Committee suggested a performance measurement matrix based on parameters reflecting the efforts for promoting financial inclusion. This matrix may be used for performance budgeting, performance appraisal and performance based incentives as suggested.

Given the improving mobile connectivity in the region, the Committee strongly recommended the use of IT-based solutions for increasing outreach. Apart from greater use of Automated Teller Machines (ATMs) including mobile ATMs, debit and credit cards, there are various models using smart cards and mobile payments for carrying out banking transactions from non-branch locations. The Committee recommended that the Development and Research in Banking Technology (DRBT) may prepare a pilot project for testing in a select area in NER by December 2006 and based on experience, this project can be rolled out in other places. Individual banks operating in the region may prepare an IT plan, branch-wise for each State with an emphasis on the actual IT-based services that the bank will provide. The number of customers who will be assisted should be estimated to measure the effort that the bank will invest on customer interfaces, staff and consumer education and incentives for the customer and the branch staff for promoting the use of IT in banking. Action in this regard may be initiated by all the banks in NER immediately and completed within six months. For RRBs, assistance may be provided by DRBT. Reserve Bank, Guwahati may allocate specific responsibility to different branches (including RRB branches) for providing need based foreign exchange facilities at these centres and arrange for special training for the branch staff.

Banks may link up with insurance companies for providing insurance products suitable to NER. Banks would also be able to market insurance linked deposit and credit products as part of their efforts for financial inclusion. The Committee recommended that the Insurance Regulatory and Development Authority (IRDA) may advise insurers to customize products that could be

publicised as a part of the campaign for financial inclusion. Similarly, the Securities and Exchange Board of India (SEBI) should enable increasing reach of depository participants and mutual funds in the region. Increasing access to capital markets would also gradually result in equity funding for projects in the region.

NER typically relies on cash as the predominant means of payment. The topography of the region and other logistics pose unique challenges to currency management. Of the 169 currency chests in the region, 89 are small with limited storage capacities. The existing network of chests in the region may be strengthened and upgraded, where required. The Reserve Bank may consider and allow RRBs to have currency chests on a special footing having regard to the fact that in many areas they are the only banks. Many of the RRBs may not be able to defray the security cost fully. The State Governments could meet such cost as in most cases the currency chests are used predominantly for Government transactions. RBI may also consider defraying a part of the cost of installation of chests for RRBs. Central security forces may be deployed to facilitate smoother inter-State movement of treasure. SLBC convenor banks may take necessary steps to provide adequate staff at branches in the region so that the mechanism for handling cash transactions can be strengthened. Where some subvention is felt necessary, proposals may be sent by SLBC convenor banks to the Reserve Bank. The Reserve Bank may encourage banks to forward innovative proposals for more efficient cash management in the region.

The Committee noted that transfer of funds within the region and from/to the region takes an inordinately long time. The payment system's dependence on currency is partly due to the delay and cost involved in transfer of funds through the banking system in the region. The following recommendations were, therefore, made for enhancing the efficiency of the payment system in the region:

- SBI may initiate steps for computerization of the remaining eight non-computerised clearing houses in the North East to be completed within six months.
- Opening of clearing houses in the five districts without such a facility and having five or more banks.
- Bharat Sanchar Nigam Limited (BSNL), the largest service provider of connectivity in the region, may take steps for improving of connectivity for leapfrogging to e-banking.
- The Reserve Bank should follow up with SBI and other banks in the region for introduction of Automated Clearing House (ACH) before end of March 2008 with the settlement at Guwahati.
- The Reserve Bank to pursue with SBI the introduction of Electronic Clearing Service (ECS) facility within six months in all the clearing houses in State capitals to enable Government payments and receipts through ECS.
- All bank branches in NER with commercial transactions should be Real Time Gross Settlement System (RTGS) enabled within six months
- A plan for implementing smart card/mobile based solutions on an open standard platform



to be accessed by all banks may be prepared by DRBT and a pilot project in a suitable area tested within six months.

- Major banks operating in the region may identify a dedicated branch for encouraging entrepreneurs who want to make investments in agro-processing, agro-based industries and the SME sector. Such branches may be equipped with staff and systems for helping the entrepreneurs in preparation of project reports and identifying their capacity building needs.
- The Small Industries Development Bank of India (SIDBI) in association with major banks in the region may set up a dedicated SME debt fund to provide co-finance of up to 25 per cent of project cost to first time entrepreneurs, where a bank is willing to provide the required funds. The fund may have experts from the region and outside as members.
- SIDBI and North Eastern Development Financial Institution (NEDFi) may prepare bankable projects in the SME sector and disseminate the same as these could be used by potential entrepreneurs. Such schemes should also cover the handloom and handicraft sectors.
- SIDBI, NEDFi and NABARD, as also major banks may sponsor Rural Development and Self-Employment Training Institutes (RUDSETIs) for training entrepreneurs in SME including industry related small business services sector.
- SIDBI and NEDFi may identify marketing outlets for various industries in the region and provide assistance for display and marketing of products.
- SIDBI/NEDFi/NABARD may sponsor Rural Industries Programmes (RIPs) in areas having identified clusters and in areas having concentration of other on-farm economic activities for training of weavers, artisans, small entrepreneurs etc.
- Credit Information Bureau of India Limited (CIBIL) may disseminate credit record of borrowers in NER among financial institutions in the region to enable the banks to have ready access to the credit history of borrowers in the region. Banks/financial institutions may supply new borrowers' records expeditiously to CIBIL so that the data base may be kept updated.
- NABARD may identify and support strategic investments in horticulture, bamboo processing/products, fisheries, poultry, animal husbandry, honey production/marketing and organic farming.
- SIDBI may open counselling wings in all State capitals for first time entrepreneurs.
- Role of NEDFi may be reviewed with a view to repositioning it as a development financial institution for long-term finance and equity support for industry and the services sector.

### 6.3 Tourism

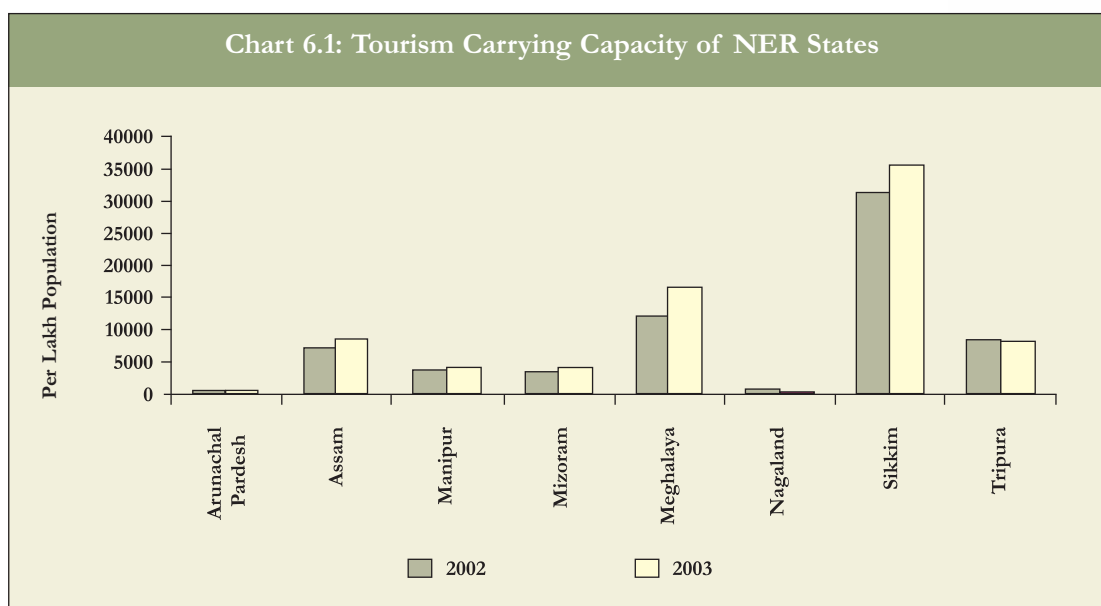
For newly emerging States, and hill States in particular, the inflow of expenditure from an expansion in tourism services is an important driver of economic development. Tourism has

tremendous income and employment ripple effects that spread far beyond the actual tourism activity itself, so that benefits disburse quite naturally to owners of small shops, peripheral services, and even to construction, banking and handicrafts. In other words, tourism-related services are naturally employment-intensive. If tourism's contribution is increased to 10 per cent of GDP in India, it can create 26 million new jobs. According to World Travel and Tourism Council (WTTC), an investment of Rs.10 lakh can generate 47.5 jobs as against 12.6 in manufacturing.

The employment effects of tourism can be quite extensive (Table 6.6A in Annexure 6.1 lists the likely direct employment effects as hotels and restaurants expand their operations). The impact on local employment and involvement of local communities with growth of ancillary livelihoods should make tourism a prime and over-arching activity for NER States.

Tourism depends on several factors: marketing of the State as a tourist destination particularly to national and international operators who largely determine a tourist circuit; the availability of hotel rooms to attract tourists of all income classes; well-organized tourism circuits and good transport infrastructure, peaceful law and order situation and administrative restrictions.

The region received only 35 lakh domestic tourists and 37,000 foreign tourists in 2005 displaying very poor footfall. Assam, Meghalaya, Sikkim and Tripura received the most tourist arrivals, with the number of tourists to Assam being greater than all the other States taken together. However, in terms of the number of tourist arrivals in relation to the population of the State, Sikkim is far ahead of the others (see Table 6.7A, Annexure 6.1). The number of tourists per capita is a good measure of the carrying capacity of a State in that any State can only accommodate a limited number of tourists (see Chart 6.1).<sup>7</sup>




Source: *Tourism Statistics*, Department of Tourism, Government of India, 2002-03

<sup>7</sup> Field visits by the research team also indicated that Sikkim is far ahead of the other states in terms of the infrastructure and preparedness for tourists. This is probably due to the lack of any history of insurgency in the state.







However, what is even more important is the type of tourism envisaged by the States themselves. Field visits by the research team indicated that most of the States are not looking at conventional tourists.<sup>8</sup> Sikkim, given the low carrying capacity of the State with a population today of just over 6.5 lakh (assuming population growth rate of 3.5 per cent since 2001) is emphasizing adventure tourism on its rivers. Mizoram recognizes the importance of outside tour operators in bringing in tourists and is trying to work out joint ventures between its local tour operators and bigger agencies outside NER. Hence, any attempt to develop tourism must carefully identify the kind of tourist activity a State wants to encourage.

The potential of the region has been repeated often, especially its great variety. The niches that the North East can offer range from attractions in tribal lifestyle, heritage, tea garden, golf, monasteries at the one end and the more commonly offered eco-tourism, adventure and wild life on the other. It is also being increasingly recognized that the people from the North East are exceptionally well-endowed in terms of personal and social characteristics for being employed in the hospitality sector. The range of opportunities that the region possesses, point to a need for specialization and development of core competencies to attract small niche tourist groups. One size fits all solutions are not desirable.

One would do well to remember that there is an information and image deficit of the region. This inhibiting factor is often at variance with ground realities over huge areas of the region which are peaceful. For example, the Ministry of DONER had undertaken media campaigns. Such campaigns should have a high quality of message content and need to be sustained over a long period, especially when they are trying to negate the misconceptions of many years. There is need for a more nuanced presentation of the destinations. Policy shifts and investment in infrastructure have flowing in the region since the early 1990s. The overall results will be visible after a few years. Hence, in the near future, niche areas for attracting committed groups should be the strategy. The fragile eco-system of the region, carrying capacity and sensitivities of the local populations are critical factors that do not sit well with a mass low-end tourist invasion. Examples of Goa, Manali and Pushkar come in mind as does Andaman Islands. While efforts to relax the Restricted and Protected Area Permits for foreign tourists are on and State Governments have been articulating these demands as well, a practical approach would be to work around these restrictions. It may still be some time till the restrictions are fully removed. ILP is likely to continue in Arunachal Pradesh, Nagaland and Mizoram.

Investment in transport infrastructure has received a boost since the turn of the new millennium. Its impact on footfall of tourists will certainly follow. Investments in road, railways and airports are being made in the public sector. Airlines are a critical input for attracting tourists from other States of India as well as from neighbouring countries. Rail links are inadequate except in Assam and road journeys in the absence of a link through Bangladesh can be extremely tenuous. Even though the rail links are presently very inadequate in the region, Indian Railway Catering and Tourism Corporation Ltd. (IRCTC) is operating rail tourism packages in several circuits in Assam. More innovative circuits can be developed for rail tourism based on the expansion plan of the

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<sup>8</sup> In Nagaland, for example, there seems to be an interest in eco-tourism and model villages are being developed which are also horticultural centres. In addition, the infrastructure provision is to a certain extent decentralized as tourism is also being put under the Communitization program of the state.





Shri Manik Sarkar, Chief Minister of Tripura laying a foundation stone of a 4-Star Hotel in Agartala


Railways especially in southern NER such as in Tripura and Barak valley in Assam. To wait for demand to pick up or to enhance the supply of air services in anticipation of demand is a perennial debate. Hence, the Government will have to continue with the policy regime that will offer incentives and enforce directives so that adequate levels of air services are maintained. A combination of short haul aircrafts, helicopter services and chartered services can be promoted. Development of airports will have to be time bound. A programme for development of airports on the lines of the Special Accelerated Road Development Programme for the North East can be considered.

While marketing of the States is crucial, what is even more critical is marketing of the region as tour operators normally operate on tourist sectors which do not necessarily correspond to geographical State boundaries. Thus, it is important to look at the region as a whole, offering tourist packages that cut across State boundaries. For this, coordination would be needed among States in terms of inter-State movements, hotel linkages and so on, which could be facilitated by a federated body of State representatives which would work in conjunction with tour operators.

Investment in the tourism sector is being promoted through the North East Industrial and Investment Promotion Policy (NEIIPP), 2007 which offers an extensive bouquet of incentives and exemptions to hotels (2 star and above) and manpower development. It is an extremely welcome step that manpower development in the sector is also covered under the incentives. The incentives on investment are, however, on plant and machinery only which does not make the NEIIPP, 2007 particularly attractive to investors in budget category hotels. However, these are early days of the policy which may need some tweaking later on to make it appropriate for the hospitality sector.

Novel methods for creating accretions in accommodation have been started by IL&FS (a private company) in collaboration with State Governments and private investors. Their strategies have shown positive outcomes in most areas with the Taj Group entering in Agartala and Guwahati. To get over the hesitations of private investors owing to a poor image of the region, mid-sized hospitality chains can be encouraged to run properties owned by State Tourism Corporations through well-structured long-term management contracts. The ideal model would be a public





partnership with private operators who would run the hotels on a long-lease basis.<sup>9</sup> This would also get around the restrictions on land use and sale in most hill States. Since land in good locations is a critical input, the States will have to play a major role, especially where the ownership of land is with a community or with families. This is a common inhibiting factor in the region for any physical development initiative. Apart from shortage of budget hotels, unintelligent taxation regimes in different States with differing magnitude, multiplicity, complexity of transport and luxury taxes render private investments difficult in the tourism sector. The States have limited capacity for project development preparation of quality project reports which hinder their capacity to obtain funds from the Central Ministry. There is also poor maintenance of tourism assets and lack of community mobilization. In NER the exotic and colourful lifestyles of the various tribal groups are an important tourist attraction in itself. Mobilization of the community to welcome tourists for rural tourism is yet to pick up in the region.

Most of the States (with the possible exception of Sikkim, Meghalaya and Assam) are not geared for conventional tourism in terms of available infrastructure of hotels and guest houses (Tables 6.8A and 6.9A in Annexure 6.1 which show that tourist accommodation in most NER States is far lower than the national level).<sup>10</sup> This was also evident from field trips to these States.<sup>11</sup> In many States (with the possible exceptions of Sikkim and Assam) the State may have to take the lead in setting up hotels, as high fixed costs deter private investors.

Tourism in NER will also depend on the available transport infrastructure. While this is considered in detail in the chapter on infrastructure, tourism development would call for a strong emphasis on intra-State linkages. The States of NER are linked to each other, both by air and rail, almost exclusively through Guwahati, and this constraint to tourist circuit and planning of transport infrastructure will need to be addressed in the tourism strategy. Making Guwahati the airport hub is a pre-eminent requirement for promoting intra-region connectivity.

The ILP system is still in operation in practice in States like Nagaland, Mizoram, Manipur and Arunachal Pradesh. While it is not strictly enforced in Mizoram and Nagaland, formal relaxation is even more important. ILP is strictly administered in Arunachal Pradesh, but the procedure for acquiring a permit in Guwahati is cumbersome even for domestic tourists. In addition, some States are still subject to RAP and PAP clearances on security grounds. The restrictive nature of these permits makes it difficult to attract foreign tourists. If security restrictions are necessary, the process of acquisition of these permits will have to be eased.

Governments will have a continuing engagement with policy formulation, creation of physical infrastructure in connectivity and possibly in accommodation (till the private sector feels confident of investing on a large scale), creation of manpower (tour operators, interpreters, transporters, guides, hospitality sector manpower). Presently, the Ministry of Tourism can offer 100 per cent funding to candidates sponsored by the NE States for tourism and hospitality related

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<sup>9</sup>This method was followed in the setting up of Kohima's main hotel, Hotel Japfu, around 15 years ago. It provides the best accommodation in Kohima even today.

<sup>10</sup>The Fourth Sectoral Summit at Gangtok on 27-28 April 2007 suggested that the shortage of rooms be addressed through the development of *daramsbalas*, one-room accommodation, low-cost, budget hotels and youth hostels along rivers and near cemeteries.

<sup>11</sup>Thus, for example, even Kohima, the capital of Nagaland has only 300 rooms across all levels, the quality of most being unacceptable for tourists. This has hampered the location of major international or national industrial fairs and seminars in the state.

training programmes. The Ministry of DONER is also engaged in similar training activity which has elicited a very encouraging response from the youth. The Ministry of DONER and NEC are also actively engaged with State Governments at the highest levels for developing the tourism sector in the region.

The region needs to brand itself. The by-line 'Paradise Unexplored' is being promoted as a NE Tourism brand. It already has an instant recall in the public mind. The focus of the Ministry of Tourism has been on the, 'Alert Independent Traveller'. This is an appropriate strategy for promoting niche tourism in the region. The States will have to come on to a common platform to see the benefits of a high quality common brand for the region with inter-State circuits. Under the North Eastern Council, the North East Tourism Forum has been created with a challenging objective of preparing the Tourism Master Plan for the region.

The Approach to the Eleventh Plan says that tourism has been an important source of dynamism in recent years and is poised for even more rapid growth. It is difficult to estimate the full contribution of tourism to the economy since much of it shows up indirectly in sectors such as hotels and restaurants, transport and handicrafts but there is general agreement that the sector has great potential and needs to be encouraged.<sup>12</sup>

A suggested starting point for tourism to take off in the region could be to identify a few core circuits, nurture them for few years and gradually branch into more exotic products and destinations. The profile of the tourists who are presently visiting the region (howsoever inconsequential in a number) needs to be charted. A robust data base of offerings is also not available presently though there are many scattered initiatives. Tourism is serious business which needs a strong backbone of data base management and feedback system.

Some important tourist circuits in North East India

- (i) Guwahati-Tezpur-Bhalukpong-Bomdilla-Tawang-Tezpur-Guwahati
- (ii) Guwahati-Shillong-Cherrapunji-Guwahati
- (iii) Imphal-Thoubal-Chandel-Tengnoupal-Moreh-Imphal
- (iv) Guwahati-Manas-Pasighat-Miao-Mokokchung-Kohima-Kaziranga-Guwahati
- (v) Guwahati-Namdafa-Dibrugarh-Mon-Mokokchung-Toupheima-Kohima-Guwahati(vi)  
Bagdogra-Titam-Telling-Yuksom-Tashiling-Ravongla-Gangtok-Rumtek-Bagdogra

North East India is the starting point of South East Asia. There are natural and cultural affinities between the region and South East Asia, China, Bangladesh and Myanmar. 96 per cent of the region is bound by international borders. India's Look East Policy holds potential for the region to break out of its landlocked borders and engage in cultural, economic and tourism related interactions with its international neighbours. Despite India's uneven bilateral dynamics with its eastern neighbours, travel restrictions need to be eased gradually whether by land or air. Sikkim can

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<sup>12</sup> The study group of the Parliamentary Standing Committee on transport and tourism in its 47th report recommended taking the step to beautify lighthouses for attracting tourists. It has, therefore, been planned to develop a few lighthouses as heritage lighthouses for attracting tourists. A token provision of Rs.1 crore has been made for the project (shipping and inland water transport for the Eleventh Five Year Plan)



be developed as a hub linking other Buddhist destinations in Nepal, Bhutan, the Tibet Autonomous Region and Tawang area of Arunachal Pradesh to a pan-regional Buddhist circuit. The existing Indo-Myanmar link through Moreh already draws a fair number of domestic tourists. Improved infrastructure and promotion could make it a thriving tourist destination with possibility of Indian tourists being permitted to travel upto Mandalay in Myanmar. A request by the Government of Manipur for a bus service between Imphal and Mandalay is under discussion between India and Myanmar. This needs to be followed up. Travel between Tripura, Bangladesh and Barak valley can also open up hitherto unexplored circuits.

The frequency of flights between Guwahati and Bangkok needs to be increased and flights between Guwahati and Dhaka, Bhutan, Nepal and Kunming need to be introduced. At least one more airport in NER, perhaps at Agartala to cover the southern part of NER has to be developed as an international airport.

To fully benefit from natural, cultural, business, leisure, spiritual, religious, ecological, adventure and medical tourism, the Eleventh Plan should focus on the creation of adequate tourism infrastructure like modernization and expansion of airports, increase in accommodation facilities under star and budget category hotels and improved road connectivity to tourist destinations. At the same time it is important to ensure the upkeep and preservation of historical sites, lakes and rivers—all of which attract tourists. Measures need to be devised to enhance India's competitiveness as a tourist destination by *inter alia* reducing luxury tax and sales tax on ATF and by providing hassle-free inter-State movement of passenger vehicles. Hotel management and catering education programmes need to be widened and hitherto undeveloped archaeological sites opened up for development and maintenance through public-private partnerships. It is also vital to ensure that tourists, particularly women, feel safe in the country.

Attracting tourists is an intensely competitive task and has to be looked at in a very businesslike manner. Merely repeating that NER has a plethora of attractions can only generate complacency. Attractions have to be converted into footfalls and footfalls should give equitable and sustainable returns to the community and the environment. It is necessary that the States in the region recognize that their engagement with the sector has to be at a much higher level of priority and involvement than it is at present.

## 6.4 Recommendations of Shukla Commission on Banking and Tourism<sup>13</sup>

Various committees on NER development have recommended the development of the tourism and banking sectors in these States. The Shukla Committee, which was constituted in 1998, came out with its recommendations for the promotion of the tourism and banking sectors in NER.

Regarding the development of tourism, the committee recommended the establishment of the Northeast Tourist Development Corporation (NDTC). It also further recommended that the new NTDC with NEC and the tourist department of the respective States should work out plans for the development of tourist sites and related infrastructure in the region. The committee

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<sup>13</sup> The Shukla Committee Report, 1998.



emphasized the need for an international airport in Guwahati. It also suggested that steps should be taken to attract foreign tourism through special international packages in consultation with neighbouring countries like Bangladesh, Bhutan, Nepal, Myanmar and Thailand.

In order to attract more tourists, there is a need to simplify and relax the Restricted Area Permit (RAP) regime for some special areas. Provisions should be made to issue inner line permits at all major tourist offices, railheads, airports and State entry gates along with national highways. Low budget tours should be promoted for trekkers, campers and young people. The Committee recommended special holiday railway concession during festival seasons. Permission should be given to use chartered flights for NE package tours. Special steps should be taken to attract tourists through advertisements by tourist offices, travel agencies and airlines.

Regarding banking sector development in the north east, the committee recommended improving the credit-deposit (CD) ratio and to considering industrial finance as a part of priority sector lending. The Committee suggested cross subsidization of the interest rates and reintroduction of capital investment subsidy in the region. The Government, RBI and all all-India financial institutes should provide adequate funds to enable the newly established North Eastern Development Financial Corporation to perform its role effectively in the region. The State Governments should put maximum effort to create an investor friendly environment to attract more private capital.

## 6.5 Recommendations of the State Development Reports of NER on Tourism and Banking<sup>14</sup>

Most of the State development reports of NE States (Assam, Tripura, Sikkim and Manipur) recognize tourism as an important sector of the NER economy, and the need to develop it for greater income generation. More emphasis on sustainable eco-tourism, adventure tourism, village tourism and rural tourism would bring in high-value tourism. All the States understand the importance of Government and private sector participation in the development of the sector in their respective States. Assam gives importance to the involvement of local people in the development of tourism and rural tourism in particular. The role of NGOs in the development of rural tourism has been highlighted in Sikkim. The *Assam Development Report* recommended providing fiscal incentives to private entrepreneurs for marketing of potential tourist places. All NE States lay emphasis on the improvement of tourism-related infrastructure and relaxation of the permit system in the region. The *Sikkim State Development Report* recommends opening up the Nathu La pass to boost tourism in the region. Assam and Tripura give importance to improving the security scenario of the region to attract more tourists. Most of the States lay emphasis on the formulation of policies for the promotion of environmentally sustainable tourism in the region.

Regarding development of the banking sector, almost all States consider the low CD ratio a matter of concern. So steps should be taken to attract more deposits: low-interest rate credit should be provided for the priority sector to improve the CD ratio of the region. In order to attract more deposits, the *Tripura State Development Report* recommends initiating lucrative schemes in the

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<sup>14</sup> Based on Assam, Tripura, Sikkim and Manipur State Development Reports





State. The State development reports also recommend introducing e-banking and tele-banking in the region.

## 6.6 The Way Forward

The vision for this sector will take off from the recommendations of earlier committees that have worked on development strategies for NER. There is no doubt that easing Restricted Area Permits and Inner Line Permits will greatly improve tourist flows to the region. Domestic tourism is a function not just of air connectivity but also road and rail links, and the development of the latter two are particularly important due to cost factors and their larger carrying capacity. In contrast, the plan to develop Guwahati as an international airport has failed to take off because it was based on a supply-side approach (the assumption that the supply of a facility will create demand for it) rather than an analysis of the demand for various tourism services.

The various indicators for NER, which are commonly used for looking at banking development, show that despite improvement in the last five years, the level of financial outreach is low. The main factors that impede banking and financial development are the topography of the region, sparse settlements of population, infrastructural bottlenecks such as transport, communication and power, low level of commercialization, lack of entrepreneurship, law and order conditions in some parts land tenure system especially in hilly areas, a development strategy based on grants rather than loans, low network of branches, lack of simple customized and flexible financial products to suit the needs of the local population, poor loan recovery experience, lack of awareness of banking services and inadequate payment systems.

It is evident that a financial market exists in NER, although most of the financial requirements are small. Banks have hardly been able to penetrate this market given their thin spread of branches and inappropriate products. The region is rich in traditional institutions, some of which are involved in financing. Thus in order to access these markets, the formal banking industry has to undergo a radical overhaul of its systems. Primarily they need to change the character, structure and products designed for this region. Given the large scale diversity of the region it is imperative to build linkages with institutions which are more locally based and embedded within the community which not only includes micro-financing institutions but also traditional institutions.

The recommendations for banking are based on the low spread of banking and NEDFi's inability to service small loans, which are particularly important for small agricultural producers. The extension of NEDFi activities to remote areas via non-banking financial intermediaries or well-established NGOs in these areas would greatly ease credit availability to these groups. In banking, the immediate need is to expand the availability of credit to farmers and entrepreneurs. Given the remoteness of hill areas this will require taking banking to the people. NEDFi can work with non-banking financial intermediaries (NBFIs) and NGOs to access people located in smaller villages and hamlets. NEDFi can provide refinance to these agencies.

## 6.7 Recommendations

- Banks should be induced to open branches in blocks where there are no branches. Where security is an issue, branches could be located near police establishments.

- Young staff be posted with a fixed tenure to ensure continuity. There should be enough incentives for postings in NER.
- For skill development, instead of following the traditional training modules, it is imperative that market driven skill requirements be identified and necessary courses and infrastructure created.
- Self-employment schemes should be worked out in consultation with banks to provide larger amounts of funds to the educated unemployed.
- Lending through SHGs should be increased where past experience has generally been satisfactory. Lenders should consider raising the quantum of loans through the SHG medium, for example with respect to groups of educated youth undertaking a cluster of entrepreneurial initiatives in the area of information technology. NABARD and NEDFi should be actively involved in formulating such proposals.
- The banks will have to shed traditional approaches and adopt an aggressive business model for increasing the number of deposit and loan accounts and volume of business. This will call for a 'mission mode' to be adopted with wide publicity among all stakeholders especially the State administration local community based organizations and local leaders who can act as facilitators.
- Although the loan policy for a bank is uniform for the entire country, banks operating in NER may review their loan policies and make necessary changes due to the peculiar conditions in the North East.
- In the North East lack of a proper land tenure system and issues of land ownership rights result in Banks facing problems of collaterals for granting loans. It is, therefore, necessary to explore ways of addressing the problem of collateral. Land Possession Certificate (LPC), where available, may be taken for establishing proof of right to cultivate the land. Where LPC is not available, a letter of comfort or certificate from the group/local tribal bodies/farmers' clubs/VDBs regarding the borrowers' right to cultivate land may be taken. In those parts of the hills where there is no practice of issuing documents conferring transferable rights or where the procedure is cumbersome, the respective Governments (or autonomous councils) should expeditiously put in place a system of issuing land ownership or possession certificates based on a cadastral survey.
- SIDBI and NEDFi may prepare typical bankable projects in a variety of industries in the SME sector and disseminate the same as these could be used by potential entrepreneurs. Such schemes should cover the handloom and handicraft sectors.
- Regional Rural Banks and State Cooperative Banks need to be strengthened in terms of manpower, capacity building and use of IT. RRBs may appoint staff on a contract basis with remuneration linked to achievement of certain targets. With the help of IT based systems, RRBs will be able to provide all services that a commercial bank does. State Cooperative Banks may also be similarly strengthened by the State Governments.



- A federated body of the NER States should identify sites that will form part of a tourist circuit which will be developed in coordination with tourist agencies.
- Infrastructure (accommodation, connectivity) related to tourist circuits and to other forms of tourism in NER will be developed appropriately.
- In the short run, States that have the natural resources could concentrate on developing their adventure and eco-tourism potential given the deficiency of infrastructure.

### IT Enabled Services (ITeS)

The ITeS-BPO industry is growing at an overwhelming pace and is giving a major fillip to the Indian economy. India has established its leadership position globally in the offshore market and now the availability of skilled manpower is one of the key barriers to the fast growth of the industry. According to an assessment, the ITeS industry alone will need 2.7 million people by 2012.

Approach Paper to the Eleventh Plan notes the emergence of severe shortage of trained personnel for the Information Technology Enabled Services (ITES) in the future. According to the NASSCOM-Mckinsey report, 2005, there will be a shortage of about 500,000 personnel by the end of this decade itself.<sup>15</sup> The NER is considered suitable for developing a hub for such services given the climatic conditions and the high level of literacy. As the personnel costs of IT industry in the rest of the country are going up, the NER, with comparatively low wages, should be in a position to attract IT companies. The North-East Region has the potential to become the back office for the Southeast Asian and Far East Asian countries. It is thus imperative that the potential of the NER in this respect should be tapped immediately and not limited by inadequate infrastructure. The North-East States should endeavour to develop themselves into preferred IT destinations by creating an enabling environment with appropriate policy intervention and PPP models.

In a major and pioneering effort, the Ministry of DoNER has supported the NASSCOM Assessment of Competence Test (NAC) for the undergraduate youth of the Region. This is a certification and benchmarking programme for employment in the IT industry. Apart from providing a filtering criterion for employers, it will also help in identifying the training needs. The States may engage NASSCOM on a continuing basis in this endeavour since it has long term implications for employment, training and modification of curriculum.

The DOEACC, an autonomous society of the Department of Information Technology, has centres at Aizawl, Imphal, Tezpur (with extension centres at Guwahati and Kohima). The centres should be established in all the States of the Region. The States should take appropriate measures for promotion of local entrepreneurship in IT. A scholarship based system of identifying, nurturing and promoting IT talent should be introduced.

The Government should work towards a One India Plan for Bandwidth so that the North-East States do not suffer from the high cost of bandwidth which will affect the growth of the sector as well as investment in the Region.

Chapter 7

# INFRASTRUCTURE







## Chapter 7

# Infrastructure

Infrastructure development is a fundamental prerequisite for realizing the vision of progress towards peace and prosperity and for creating an investment climate and market development in the North East. In fact, this is a basic prerequisite for development and has a strong complementarity with measures to improve health and education as well as industry and services. Expansion in the supply of basic infrastructure such as an efficient transportation network, telecommunications and power and broadband connectivity, is extremely important for the development of the region. Apart from delivering essential services that improve the quality of life and livelihoods, these elements of the infrastructure are crucial for establishing a stable and peaceful society and hence for the 'progress and prosperity of the region.

The physical infrastructure essential for the development of the region may be classified into the following broad categories:

- Transport and communication infrastructure: roads, railways, ports, post offices, telephone exchanges and networks;
- Power infrastructure: power generation station, transmission networks;
- Agronomic and agro-marketing infrastructure: canals, tube wells, irrigation facilities, fertiliser distribution points, HYV seed distribution shops, warehouses and cold storage facilities;
- Industry-related infrastructure: factories; and
- Infrastructure relating to provision of public amenities: education, health and sanitation.

This chapter looks at infrastructure related to transport, communications and power. Clearly, infrastructure plays a very important role for all the North Eastern states as its share in Net State Domestic Product (NSDP) ranged from 7 per cent to 28 per cent for the region (Table 7.1A in Annexure 7.1) between 1993-94 and 2002-03. The share of infrastructure has been continuously rising for all the NER states over time (except for Mizoram where the share of infrastructure declined from 18 per cent in 1993-94 to 12 per cent in 2002-03). The share of infrastructure for Nagaland was the highest at 28 per cent in 2002-03. Infrastructure in the North East as a whole (except for Arunachal Pradesh and Assam) was growing at a significantly higher rate than the national average (Table 7.2A in Annexure 7.1). The only exceptions were Arunachal Pradesh and Assam.

### 7.1 Transport

Transport infrastructure is of great importance in the region to strengthen its integration within itself, with the rest of the country and its neighbours, as well as to transport people and goods more effectively within and out of the region. It is a vital input for the proposed shift from subsistence agriculture to cash crop based farming, as well as the planned development of industry and the service sector. Most of the area in the region is hilly and undulating with low population densities, accompanied by low per area production of goods. In the hilly terrain, what it is in the NER (except in Assam and some parts of other states) development of inland waterways is the most expensive. Similarly, rail connectivity in such a terrain is not only time consuming but would



need prohibitive investments, probably beyond the means of the nation. It is road connectivity which would play a dominant role in fulfilling the transportation needs of the public. Air connectivity would certainly play a role for a limited segment of people and goods.

### 7.1.1 Highways, Roads and Bridges

A comparison of the road network of the region with the network in the rest of the country indicates that the road network per capita is significantly higher in NER relative to the rest of the country (columns 2, 4 and 6 in Table 7.3A in Annexure 7.1). This is an expected outcome given the hilly terrain and the low density of population. However, road length per unit area is higher only in Assam, Nagaland and Tripura and not in the other hill states. Since this would have been a more accurate indicator of the ease of movement of passenger and freight traffic one can conclude that road infrastructure is relatively deficient in the NER states. This is particularly true for the hill states as other modes of travel are either too expensive or difficult to provide.

It would also be useful to look at the classification of roads as this has implications for funding of road development schemes (Table 7.4A in Annexure 7.1). Most previous studies have, by and large, looked at development of either state roads or national highways.<sup>1</sup> In most states, village and district roads are the dominant category. These are particularly important for facilitating intra-state movement of people and freight.<sup>2</sup> The low level of inter-state trading of foodgrains



Dr. Montek Singh Ahluwalia, Dy. Chairman, Planning Commission inaugurating a road in the presence of Shri Pawan Chamling, Chief Minister Of Sikkim

<sup>1</sup>See, for example, the Shukla Commission Report (1998) for an excellent compilation of planned development of road network as per the requests of the State Government.

<sup>2</sup>This point was also stressed in a meeting between the study team and officials in Meghalaya, who pointed out that central work on roads was very slow. The officials also pointed to the need for road connectivity between the Garo, Jainti and Khasi hills under the National Highways programme; a Shillong Bypass has also become crucial, as traffic has begun choking the capital of Meghalaya.

and other commodities makes it important to focus on developing these roads within the broad category of state roads.<sup>3</sup>

State Governments have also been asking repeatedly for converting state highways into national highways<sup>4</sup> (See Table 7.5A in Annexure 7.1 for a list of national highways in the NER states). Some of these demands are justified. For, example, the East-West highway demanded by Arunachal is crucial, as at present one cannot travel from one district to another in the state without exiting into Assam.<sup>5</sup> The Trans-Arunachal Highway will now be constructed in the Eleventh Plan. Without the development of an internal highway, activities like tourism and private transport cannot take off. Tourists (or freight traffic) would have to repeatedly pay entry/exit taxes as they move from one district of Arunachal to another. A major issue in road infrastructure, especially in the hill states is one of maintenance; with no internal resources and small state plans (especially in the hill areas), the expansion in the road network will mean that maintenance will take up a larger share of states' resources. Internal roads are already falling into disrepair in most places.<sup>6</sup> The importance of the East West highway in Arunachal has also been emphasised by The Task Force on Connectivity of the Planning Commission (Planning Commission, 2006).

Construction of roads is of the highest priority for both Central and State Governments in the region. In the Eleventh Plan, under the various interventions of the Department of Road Transport and Highways, a very massive road construction initiative has started. The completion of this initiative has the potential to change the connectivity quality in the North Eastern Region. A snapshot of approved road programmes under the Department of Road Transport is under the Department of Road Transport is Table 7.1.

**Table 7.1: Approved Road Programmes – under the Department of Road Transport**

(Length in Km.)

State	NHDP-II	NHDP-III	SARDP Phase A	SARDP Phase B	Total
Arunachal Pradesh	Nil	22	244	2707	2973
Assam	678	613	1049	471	2811
Manipur	Nil	112	147	150	409
Meghalaya	Nil	136	176	402	714
Mizoram	Nil	140	102	807	1049
Nagaland	Nil	28	89	1217	1334
Sikkim	Nil	0	167	233	400
Tripura	Nil	0	330	446	776
<b>Total</b>	<b>678</b>	<b>1051</b>	<b>2304</b>	<b>6433</b>	<b>10466</b>

<sup>3</sup>Officials of Arunachal in a meeting with the study team detailed the severe problem of road connectivity within the state, in which 86 per cent of the villages are not connected by roads. NER states have been asking for a revival of the criteria for fund allocation under the Prime Minister Grameen Sadak Yojna (PMGSY).

<sup>4</sup>See, for example, the Shukla Commission Report.

<sup>5</sup>This point was also strongly emphasized by the Arunachal authorities in meetings with field trip teams.

<sup>6</sup>For example, NH52 from Guwahati to Itanagar showed signs of extreme wear and tear due to erosion. This is probably an annual event, occurring when the Brahmaputra overflows its banks; yet, no attempt appears to have been made to improve the technology used to deal with the erosion.



**National Highway Development Programme-II** - The East-West Corridor beginning at Porbandar, Gujarat to be linked to the NE through a 678 km. four-lane highway entirely in Assam from Srirampur to Silchar. It is targeted to be completed in December 2009 at a project cost of Rs.6,000 crore.

**National Highway Development Programme-III** - NHDP-III proposes to widen 1,051 km. stretches of various National Highways to improve connectivity of state capital towns (Table 7.2).

NHDP-II and Special Accelerated Road Development Programme for North East (SARDP-NE) will provide four-lane connectivity to all state capitals except Gangtok.

**Table 7.2: National Highway Development Programme-III**

NH NO.	State	Stretch	Length
36/39	Assam/Nagaland	Daboka-Dimapur	124
39	Nagaland/Manipur	Kohima-Imphal	140
44	Meghalaya/Assam	Shillong-Churaibari	252
54	Assam & Mizoram	Silchar-Aizawl	190
		<b>Total</b>	<b>706</b>

### Arunachal Package

Under the PM's package, connectivity to Arunachal will be improved dramatically. The package incorporates:

- Four-Lane connectivity to Itanagar.
- Trans-Arunachal Highway.
- Construction of public roads to link the hydel power project in Arunachal Pradesh.
- Two-lane connectivity of district headquarters.

The total length of the Arunachal Package is 3,360 km. The Trans-Arunachal Highway covering a distance of 1,850 km. will link the eastern and western sides of the state. It will ease travel within the state and satisfy the long pending demand of the people of that area.

### Special Accelerated Road Development Programme for North East (SARDP-NE)

Phase "A" and Phase "B" cover construction and improvement of 8,737 km. The objectives of SARDP-NE Phase 'A' and 'B' are:

#### *Phase 'A'*

- To provide at least 2-lane NH connectivity to all state capitals with East-West Corridor;
- To provide improved connectivity to Dibrugarh to properly connect it with the rest of the country, Arunachal Pradesh and Myanmar;

- To provide a 2-lane road of NH standards to Nathu La (the trade route with China) and to improve 328 km. state roads in Arunachal Pradesh, Manipur and Nagaland;
- All National Highways in Assam will be at least 2-lane wide;
- Direct inter-connectivity by at least a 2-lane NH to all state capitals, except Agartala and Aizawl; and
- To improve road connectivity to Bhutan and Myanmar.

### *Phase 'B'*

- To provide connectivity to all district headquarter of NER by at least a 2-lane road;
- To provide inter-connectivity to all the state capitals by at least a 2-lane NH;
- To improve certain roads of strategic importance;
- To provide improved connectivity to remote and backward area; and
- To improve road connectivity to border areas, land custom stations and neighbouring countries.

Phase 'A' of SARDP-NE covers 2,304 km. with a Gross Budgetary Support of Rs.4,673 crore (total expenditure Rs.12,793 crore) and targeted to be completed by 2013.

Under Phase 'B' of SARDP-NE, the length to be covered is 4,570 km. The modalities of the investment decision have not yet been finalized. Status and prospects of connectivity of the district headquarters to the nearest National Highway are given in Table 7.3.

**Table 7.3 Status and Prospects of Connectivity of District Headquarters to nearest NH**

State	Total DHQs	Status of connectivity by 2-lane road		
		Already connected	Under Phase 'A' of SARDP-NE	Under Phase 'B' of SARDP-NE
Arunachal Pradesh	16	0	0	16
Assam	26	12	4	10
Manipur	9	6	0	3
Meghalaya	7	3	0	4
Mizoram	8	0	2	6
Nagaland	11	2	1	8
Sikkim	4	0	1	3
Tripura	4	0	3	1
<b>Total</b>	<b>85</b>	<b>23</b>	<b>11</b>	<b>51</b>

Two other very critical roads for the North East are (a) an alternate highway for Sikkim and improvement of NH 31A linking Sevoke (West Bengal) to Gangtok (b) Kaladan road in Mizoram.





Sikkim is now connected with the rest of the country with NH 31A between Sevoke and Gangtok. Due to the uncertain topographical nature of that road, land slides and other blockages frequently hamper the supply of essential goods and travel between Sikkim and the rest of India. It is, therefore, important for Sikkim to have an alternate highway between Sevoke and Ranipur which has been estimated at only a slightly higher cost than improving the existing highway. The process of improving the existing highway will involve stoppages which may not be desirable from the view point of the state with the Gangtok bypass and 22 km. long Gangtok-Nathu La road, it will be able to form a continuous new highway from Sevoke (West Bengal) to Nathu La via Gangtok. Thereafter, both roads can be kept operational so that the state is not held hostage to any natural calamity on any one of these critical link roads.

The link road to Kaladan project, a highway of about 117 km. from near Tuithumhanar on the Indo Myanmar border to Nlakawn on NH 54 in Mizoram is required to be constructed to facilitate the Kaladan Multi-Modal Transit Transport Project in Myanmar. Though the present proposal is for a single lane/intermediate link standard, it is desirable that a 2-lane highway be constructed. The tentative cost of the 2-lane highway is estimated to be Rs.500 crore. However, the present objective should be to complete the single-lane road by 2012 in sync with the completion of the Kaladan Multi-Modal Project in Myanmar. This project is critical because it offers an alternate link between the ports of India on its East Coast to the North East by passing Bangladesh and the Siliguri Corridor.

For Meghalaya as well as the state of Tripura, it is essential that the four-laning of NH-40 from Jorabat to Silchar is completed. To reduce traffic congestion in Shillong, construction of Shillong and Jowai bye-pass is essential. Completion of double-laning of NH-40 (Jorabat-Shillong-Indo/Bangladesh near Dawki-Amalren-Jowai), NH-51 (Paikan-Tura-Dalu), NH-62 (Damra-Baghmara-Dalu-Shillong-Nongstoin) and NH-44 (Shillong-Jowai-Badarpur-Agartala-Sabroom) is critical for smooth movement of cargo especially as these roads lead to the Bangladesh border.

Despite the heavy investment in the road sector by the Central Government, there are issues of capacity and absorption which need to be tackled before the investments can fructify. The BOT (Toll) model of financing is unsuitable for the region due to the low volume of traffic. Annuity models can be checked and in case they are not successful, Government funding through EPC should be expedited. There is also an imperative to improve the capacity of local contractors, both technically and equipment wise. An interesting innovation of setting up equipment banks by the North East Development Finance Corporation Ltd. (NEDFi) offers a solution for better availability of advanced equipment. Large contractors can be offered bigger packages so that they find it commercially viable to invest. Land being held by community/families in many cases poses a peculiar problem for acquisitions for public projects. Land records are also not well maintained with cadastral surveys absent in most of the states. Surveys are available only in Assam, Tripura and Sikkim. The states, therefore, have to make special efforts to expedite the availability of land to the implementing agency for roads.

Due to topographical reasons, availability of aggregates for construction is a very critical issue. The cost of transportation of other material like cement and bitumen is also high. Since

construction material has to be carried from long distances raising the unit cost, importing building material from Bangladesh through a zero duty import regime, using water transport facility from Halida-Borishal-Dhubri can be an alternate solution. States should rationalize their royalty rates imposed on construction material. Local quarries need to be demarcated and allowed to be exploited for sourcing material by road construction agencies. Forest clearances are another major constrain involving long procedures and consultation.

While individual state-level road building plans are many, there is need for an integrated plan for NER as a whole which includes both inter- and intra-state linkages.<sup>7</sup> In this context, it is imperative to look at the NEC's 20 years Transport Perspective Plan for NER.

A Master Plan encompassing all categories of roads to be developed by the Ministry of DONER, in consultation with the Ministries of Shipping, Road Transport & Highways, Rural Development, Planning Commission, NEC and State Governments. The multiplier benefits of road sector programmes in promoting socio-economic growth should be factored in the proposed Master Plan. Priority should be accorded to roads providing connectivity to hydro-project sites, important LCS and other economic and commercial growth centres.

A spatial database on road information system should be created by using GIS and remote sensing facilities.

A database on roads should also be considered. Roads are constructed by multiple agencies, state, Central Government, BRO, NEC under NLCPR, PMGSY, externally funded schemes etc. Transparency in the expenditure is critical so that these huge funds are spent well.

The Pradhan Mantri Gram Sadak Yojana provides a critical link to rural habitations. Overall performance of the region has been rather disappointing.

At present bridges of only 25 mt. are allowed to be constructed under the guidelines. Heavy rains in the hilly terrain turn smaller streams into raging torrents rendering 25 mt. bridges inadequate. The guidelines should allow for bridges up to 40 mt. under PMGSY. As in the case of bigger roads, the capacity of states to take up larger amount of construction and better technical capacity for preparation of detailed project reports and overall supervision and maintenance of quality need to be improved by associating with centres of excellence in engineering like IIT, CRRI, and Regional Engineering Colleges. The road width norm needs to be changed from single width to intermediate width. At present PMGSY guidelines provide for a minimum of 250 habitations. In view of special topographical condition of the region and scattered small habitations, in blocks bordering the international boundary in the hill States, habitations within a path distance of 10 km. are now being treated as a cluster of roads under PMGSY. This is an extremely welcome change as it will provide connectivity to a larger number of habitations in mountain areas. Presently, it is restricted to border blocks but should be extended to other blocks.

Maintenance of roads is expensive in the region because of high rainfall and topographical conditions. The states being largely dependent on central sources with meagre resource generation

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<sup>7</sup> It has been pointed out by the Chief Engineer, Department. of Road Transport and Highways (NER), Govt. of India that one of the principal constraints to development of highways is delays in land acquisition and clearance for Forest departments.



of their own do not have adequate funds for road maintenance. Innovative long-term financial solutions to create a fund dedicated to maintenance of roads for the North East is called for.

The NEC's 20 years Transport Perspective Plan for NER study recommends a four-phased programme for the development of a road network measuring 20,440 km. The detailed network that needs to be developed by 20,20 is given in Table 7.4. Some planning in this direction is already evident from the fact that 8,737 km. of road network as intra and inter-state network under the Special Accelerated Road Development Programme has been approved in principle for implementation in two phases. Phase 'A' covering a length of 2,304 km. has already been approved for implementation while Phase 'B' covering a length of 6,433 km. has been approved for preparation of DPR. While the implementation of Phase 'A' has been targeted by 2013, there is immediate need to target the completion of Phase 'B' for implementation before 2015. The balance 11,703 km. also needs to be planned immediately for completion before 2020. In order to complete the entire road network as per this perspective, all the four phases may have to work simultaneously. The implementation of this road network would need an investment of more than Rs.70, 000 crore. The funds would need to be located for such an investment.

**Table 7.4 : Prioritization and Phasing of Links for Development  
(Rebuilding of Roads)**

Sl. No	Road Name		Length	Road condition	Modified phase
	From	To			
1	Mengram	Goalpara	147.00	Fair	I
2	Dumportijo	Bordoloni	146.00	Fair	I
3	Chinglang	Margherita	33.00	Poor	I
4	Byrnihat	Guwahati	17.00	Poor	I
5	Bhavanipur	Patacharkuchi	10.00	Fair	I
6	Barjhor	Nalbari	13.00	Fair	I
7	Raha	Bhavanipur	26.00	Fair	I
8	Raha	Simalguri	7.00	Fair	I
9	Guwahati	Changsari	8.00	Fair	I
10	Rangia	Baihata	26.00	Fair	I
11	Parbung	Neihbawi	180.00	Poor	I
12	Sagali	Gohpur	30.00	Fair	I
13	Golokganj	Bilasipara	46.00	Fair	I
14	Changsari	Baihata	20.00	Fair	I
15	Neelambazar	Karimganj	20.00	Fair	I
16	Neelambazar	Kanaibazar	11.00	Fair	I
17	Dharmanagar	Kanaibazar	26.00	Fair	I
18	Oinamlong	Pailapool	31.00	Fair	I
19	Khonsa	Naharkatia	57.00	Poor	I
20	Daboka	Lankapati	13.00	Fair	I

Sl. No	Road name		Length	Road condition	Modified phase
	From	To			
21	Lankapatti	Lumding	26.00	Fair	I
22	Sagali	Nijlaluk	32.00	Fair	I
23	Champaknagar	Agartala	22.00	Fair	I
24	Nichuguard	Dimapur	15.00	Good	I
25	Jesami	Ukhrul	58.00	Poor	I
26	Sutnga	Kalain	62.00	V.good	I
27	Mengram	Tura	22.00	Fair	I
28	Passighat	Dhemaji	134.00	Poor	I
29	Roing	Karimganj	19.00	Poor	I
30	Chonghyimeri	Moiriani	22.00	Poor	I
31	Kherapara	Baghmara	88.00	Fair	I
32	Umsning	Jagiroad	61.00	Poor	I
33	Champai	Tuisen	34.00	Poor	I
34	Shillong	Nongpiur	8.00	Poor	I
35	Bishnupur	Nongthawkhong	16.00	Poor	I
36	Seppa	Itanagar	150.00	Poor	I
37	Nongthawkhong	Churchandpur	24.00	Poor	I
38	Patacharkuchi	Barjhor	16.00	Fair	I
39	Srirampur	Gossaigaon	14.00	Fair	I
40	Bongaigaon	Gerukabari	15.00	Fair	I
41	Gossaigaon	Sherfanguri	24.00	Fair	I
42	Gerukabari	Simalguri	26.00	Fair	I
43	Siju	Srirampur	100.00	Fair	I
44	Baghmara	Siju	32.00	Poor	I
45	Yazali	Itanagar	37.00	Poor	I
46	Pecharthal	Kumarghat	14.00	Poor	I
47	Kumarghat	Manubazar	30.00	Poor	I
48	Nalbari	Rangia	12.00	Fair	I
49	Boxirhat	Golaganj	9.00	Fair	I
50	Manja	Dimapur	29.00	Fair	I
51	Tumpung	Manja	55.00	Fair	I
52	Siju	Boxirhat	100.00	Fair	I
53	Daboka	Kothiatrli	14.00	Fair	I
54	Wangla	Bhalighat	35.00	Fair	I
55	Norhima	Bokajan	50.00	Fair	I
56	Thingkew	Parbung	22.00	Poor	I
57	Thingkew	Churchrandpur	42.00	Poor	I
58	Passighat	Roing	84.00	Poor	I



Sl. No	Road name		Length	Road condition	Modified phase
	From	To			
59	Lunglei	Paikhal	124.00	Poor	I
60	Bomdila	Dhekjaluli	135.00	Poor	I
61	Oinamlong	Nungba	19.00	Poor	I
62	Imphal	Nungba	40.00	Poor	I
63	Itanagar	Sagali	40.00	Poor	I
64	Udarband	Silchar	11.00	Fair	I
65	Sutnga	Jowai	40.00	Fair	I
66	Hatikuli	Lumding	49.00	Fair	I
67	Chizimi	Jesami	17.00	Poor	II
68	Imphal	Bishnupur	26.00	Poor	II
69	Ziro	Yazali	37.00	Poor	II
70	Neihbawi	Aizawl	9.00	Fair	II
71	Neihbawi	Kolasib	47.00	Fair	II
72	Kolasib	Kashipur	47.00	Fair	II
73	Golaghat	Bokajan	60.00	Fair	II
74	Byrnihat	Borkhat	16.00	Fair	I
75	Taliamura	Champaknagar	22.00	Fair	II
76	Manu bazar	Ambassa	26.00	Fair	II
77	Kalain	Karimganj	27.00	Fair	II
78	Manja	Diohu	16.00	Good	II
79	Kohima	Maopundong	31.00	Good	II
80	Lunglei	Hrangchalkawn	9.00	Poor	II
81	Roing	Tezu	100.00	Poor	II
82	Bame	Dhemaji	121.00	Poor	II
83	Mamit	Tukkalh	19.00	Poor	II
84	Aizawl	Paikhal	13.00	Fair	II
85	Pailapool	Rajabazar	11.00	Fair	II
86	Damra	Krishnai	37.00	Fair	II
87	Silchar	Pailapool	21.00	Fair	II
88	Tezpur	Jakhalabandha	24.00	Fair	II
89	Dibrugarh	Moranhat	40.00	Fair	II
90	Silchar	Saichapa	18.00	Fair	II
91	Salchapa	Kalain	24.00	Fair	II
92	Palazi	Seppa	105.00	Poor	II
93	Jameri	Palazi	110.00	Poor	II
94	Balirding	Lakhimpur	9.00	Fair	II
95	Leite	Hrangchalkawn	38.00	Fair	II
96	Nijluluk	Balirding	17.00	Fair	II
97	Keitnnikawn	Leite	56.00	Fair	II



Sl. No	Road name		Length	Road condition	Modified phase
	From	To			
98	Tuli	Chonghyimeri	50.00	V.poor	II
99	Shillong	Umsning	39.00	V.good	II
100	Lakhimpur	Bordoloni	8.00	Fair	II
101	Bordoloni	Dhemaji	8.00	Fair	II
102	Tinsukia	Makum	9.00	Fair	II
103	Orang	Dhekjaluli	10.00	Fair	II
104	Zobawk	Seling	34.00	Fair	II
105	Zobawk	Keitnnikwan	41.00	Fair	II
106	Aizawl	Seiling	13.00	Fair	II
107	Tukkalh	Manpoi	17.00	Fair	II
108	Dhekjaluli	Tezpur	50.00	Fair	II
109	Dimapur	Diphu	35.00	Fair	II
110	Aizawl	Mamit	34.00	Fair	II
111	Wakro	Manthi	85.00	V.poor	II
112	Nongpiur	Mawphlang	10.00	Poor	II
113	Golokganj	Gossaigaon	49.00	Poor	II
114	Niaunu	Lu	15.00	Poor	II
115	Bimpuria	Nijlaluk	11.00	V.good	II
116	Gohpur	Bimpuria	20.00	V.good	II
117	Hatikuli	Dihangi	20.00	V.poor	II
118	Hajo	Barpeta	46.00	V.poor	II
119	Tezu	Santipur	83.00	Poor	II
120	Songsar	Mengram	90.00	Fair	II
121	Kohima	Chizame	52.00	Good	II
122	Diphu	Lumding	32.00	Poor	II
123	Maha	Haflong	40.00	Poor	II
124	Mankachar	Mahendraganj	37.00	Poor	II
125	Tribangcherra	Ramchandraghat	50.00	Poor	II
126	Sanis	Telelitol	42.00	Poor	II
127	Ramchandraghat	Agartala	62.00	Poor	II
128	Bagafa	Sabrum	67.00	Poor	II
129	Saipung	Haflong	125.00	Poor	II
130	Kumarghat	Tribangcherra	46.00	Poor	II
131	Tato	Machuka	50.00	Poor	II
132	Diban	Bijoynagar	100.00	Poor	II
133	Konkarajhar	Garobhasa	8.00	Fair	II
134	Tainulpur	Rangia	26.00	Fair	II
135	Ukhrul	Humpun	19.00	Fair	II



Sl. No	Road name		Length	Road condition	Modified phase
	From	To			
136	Bilasipara	Konkarajhar	34.00	Fair	II
137	Garampani	Dehengi	16.00	Poor	II
138	Kawlkulh	Tuisen	26.00	Poor	II
139	Garubhasa (Haltugaon)	Sarbhong	42.00	Poor	II
140	Bame	Along	41.00	Poor	II
141	Chekawn	Leite	45.00	Poor	II
142	Along	Pangin	50.00	Poor	II
143	Jowai	Garampani	54.00	Poor	II
144	Nongpiur	Laitlyngkot	9.00	Poor	II
145	Imphal	Wathamleirak	19.00	Poor	II
146	Henima	Thousem	44.00	Poor	II
147	Garubhasa	Bongaigaon	23.00	Fair	I
148	Sherfanguri	Garubhasa (Haltugaon)	24.00	Fair	I
149	Longching	Laruri	80.00	Fair	II
150	Leike	Laisong	8.00	Poor	II
151	Hailakandi	Neelambazar	16.00	Poor	II
152	Henima	Laike	19.00	Poor	II
153	Nengkhra	Sihu	32.00	Poor	II
154	Tumpung	Dengaon	11.00	Fair	II
155	Dengaon	Daboka	20.00	Fair	II
156	North Salmara	Goalpara	43.00	Fair	II
157	Bilasipara	North Salmara	49.00	Fair	II
158	Kothiatri	Nagaon	20.00	Fair	II
159	Merangkong	Tuli	20.00	V.poor	II
160	Melaghar	Sonamura	10.00	Fair	II
161	Norhima	Kohima	22.00	Fair	II
162	Udarband	Amarpur	23.00	Fair	II
163	Makum	Margherita	71.00	Fair	II
164	Ambassa	Gandacherra	57.00	Fair	II
165	Charilam	Udaipur	20.00	Fair	II
166	Lekhapani	Margherita	84.00	Fair	II
167	Agartala	Charilam	22.00	Fair	II
168	Zamithang	Tawang	89.00	Fair	II
169	Wokha	Norhima	100.00	Fair	II
170	Shella	Cherrapunji	131.00	Fair	II
171	Wangla	Sonari	39.00	Fair	II

Sl. No	Road name		Length	Road condition	Modified phase
	From	To			
172	Udaipur	Bagafa	55.00	Fair	II
173	Sohrarim	Cherrapunji	79.00	Fair	II
174	Laisong	Rajabazar	18.00	Poor	II
175	Rongjeng	Nengkhra	42.00	Poor	II
176	Tawamg	Bomdila	178.00	Poor	II
177	Nungba	Bishnupur	37.00	Poor	II
178	Pecharthal	Dharmanagar	26.00	Poor	II
179	Myllat	Pynursla	6.00	Fair	II
180	Jowai	Myllat	42.00	Fair	II
181	Khulurbond	Maha	20.00	Fair	II
182	Laitlyngkot	Pynursla	22.00	Fair	II
183	Dawki	Myllat	22.00	Fair	II
184	Moreh	Tengnoupal	28.00	Fair	II
185	Wathamleirak	Khurkhul	53.00	Fair	II
186	Hatikuli	Khulurbond	25.00	Fair	II
187	Maopundung	Khurkhul	65.00	Fair	II
188	Nengkhra	Songsar	22.00	Poor	II
189	Dumpotijo	Bame	42.00	Poor	II
190	Ranigodown	Upahali	15.00	Good	II
191	Ranikunda	Shella	102.00	Good	II
192	Garobadha	Tura	117.00	Good	II
193	Ranikunda	Baghmara	102.00	Good	II
194	Hrangachalkawn	Bungtlang	65.00	Poor	II
195	Silchar	Kachipur	10.00	Fair	II
196	Bokajan	Dimapur	19.00	Fair	II
197	Upahali	Guwahati	23.00	Fair	II
198	Tezpur	Mansir	24.00	Fair	II
199	Udalguri	Orang	9.00	Fair	II
200	Jorhat	Kanarbandha	26.00	Fair	II
201	Goalpara	Krishnai	30.00	Fair	II
202	Mansir	Sootea	33.00	Fair	II
203	Jorhat	Numalighat	53.00	Fair	II
204	Barpeta	Raha	26.00	Fair	II
205	Krishnai	Upahali	88.00	Fair	II
206	Sootea	Gohpur	94.00	Fair	II
207	Jagiroad	Borkhat	22.00	Fair	II
208	Ambassa	Taliamura	40.00	Fair	II
209	Sonali	Jagiroad	62.00	Fair	II



Sl. No	Road name		Length	Road condition	Modified phase
	From	To			
210	Mahar	Udharband	31.00	Good	II
211	Kohima	Nichuguard	65.00	Good	II
212	Jowai	Shillong	66.00	Vgood	II
213	Laisong	Mahar	23.00	Poor	II
214	Sunpura	Kundilbazar	23.00	Poor	II
215	Bomdila	Jamiri	23.00	Poor	II
216	Roing	Anini	32.00	Poor	II
217	Tezu	Wakro	34.00	Poor	II
218	Sangram	Palin	40.00	Poor	II
219	Chyangtajo	Sangram	60.00	Poor	II
220	Mokokchung	Zuhenboto	9.00	Poor	II
221	Tinsukia	Deohale	22.00	Vgood	II
222	Sohrarim	Mawphlang	31.00	Vgood	II
223	Mon	Longshing	65.00	V.poor	II
224	Tangza	Paneri	15.00	Fair	II
225	Rongjeng	Damra	44.00	Fair	II
226	Kanarbandha	Golaghat	28.00	Fair	II
227	Bokakhat	Amguri	26.00	Fair	II
228	Amguri	Jakhalabandha	33.00	Fair	II
229	Sibsagar	Jhanzi	33.00	Fair	II
230	Numalighat	Bokakhat	33.00	Fair	II
231	Jhanzi	Jorhat	35.00	Fair	II
232	Moranhat	Sibsagar	38.00	Fair	II
233	Paneri	Udalguri	26.00	Fair	II
234	Nagaon	Jakhalabandha	20.00	Fair	II
235	Nagaon	Sonai	1.00	Good	II
236	Humpun	New Heaven	28.00	Poor	II
237	Tainulpur	Paneri	44.00	Poor	II
238	Seling	Kawlkulh	45.00	Poor	II
239	Chowkham	Sunpura	31.00	Poor	II
240	Jameri	Manzir	61.00	Poor	II

Besides the overall network development of the region, there is definite need for widening of important roads in the region to 2-lane, 4-lane and 6-lane widths. Phase-wise widening of different highways is given in Table 7.5.

**Table 7.5 : Perspective Plan for Roads in the NER  
(Widening of roads into 2-4 lanes)**

Sl. No	Road Name		Category of road			No. of lanes	
	From	To	Length	Existing	Proposed	Existing	Proposed
1	Shillong	Umsning	39.00	NH	NH	Two Lane	Four Lane
2	Umsning	Byrnihat	45.00	NH	NH	Two Lane	Four Lane
3	Byrnihat	Guwahati	16.50	NH	NH	Two Lane	Four Lane
4	Byrnihat	Borkhat	15.50	NH	NH	Two Lane	Four Lane
5	Mengram	Tura	22.00	NH	NH	Single Lane	Two Lane
6	Mengram	Goalpara	147.00	NH	NH	Single Lane	Two Lane
7	Siju	Srirampur	100.00	NH	NH	Two Lane	Four Lane
8	Srirampur	Gossaigaon	14.30	NH	NH	Two Lane	Four Lane
9	Gossaigaon	Sherfanguri	23.50	NH	NH	Two Lane	Four Lane
10	Sherfanguri	Garubhasa (Haltugaon)	3.50	NH	NH	Two Lane	Four Lane
11	Garubhasa	Bongaigaon	22.80	NH	NH	Two Lane	Four Lane
12	Bongaigaon	Gerukabari	15.00	NH	NH	Two Lane	Four Lane
13	Gerukabari	Simalguri	26.00	NH	NH	Two Lane	Four Lane
14	Guwahati	Changsari	8.00	NH	NH	Two Lane	Four Lane
15	Changsari	Baihata	19.50	NH	NH	Two Lane	Four Lane
16	Raha	Simalguri	7.20	NH	NH	Two Lane	Four Lane
17	Nalbari	Rangia	12.00	NH	NH	Two Lane	Four Lane
18	Rangia	Baihata	26.00	NH	NH	Two Lane	Four Lane
19	Oinamlong	Pailapool	31.00	NH	NH	Intermediate	Four Lane
<b>Total Length</b>			<b>582.80</b>				
1	Byrnihat	Guwahati	16.50	NH	NH	Four Lane	Six Lane
2	Guwahati	Changsari	8.00	NH	NH	Four Lane	Six Lane
3	Jowai	Shillong	66.00	NH	NH	Two Lane	Four Lane
4	Mengram	Tura	22.00	NH	NH	Two Lane	Four Lane
5	Changsari	Goalpara	147.00	NH	NH	Two Lane	Four Lane
6	Nagaon	Sonai	0.90	NH	NH	Two Lane	Four Lane
7	Sonai	Jagiroad	62.30	NH	NH	Two Lane	Four Lane
8	Jagiroad	Borkhat	21.50	NH	NH	Tow Lane	Four Lane
9	Oinamlong	Nungba	19.00	NH	NH	Two Lane	Four Lane
10	Pecharthal	Kumarghat	14.00	NH	NH	Two Lane	Four Lane
11	Pecharthal	Dharmanagar	26.00	NH	NH	Two Lane	Four Lane
12	Kumarghat	Manu Bazar	30.00	NH	NH	Two Lane	Four Lane
13	Dharmanagar	Kanai Bazar	26.00	NH	NH	Two Lane	Four Lane
14	Manu Bazar	Ambassa	26.00	NH	NH	Two Lane	Four Lane
15	Ambassa	Teliamura	40.00	NH	NH	Two Lane	Four Lane
16	Teliamura	Champaknagar	22.00	NH	NH	Two Lane	Four Lane





Sl. No	Road Name		Category of road			No. of lanes	
	From	To	Length	Existing	Proposed	Existing	Proposed
17	Champaknagar	Agartala	22.00	NH	NH	Two Lane	Four Lane
18	Sutnga	Jowai	40.00	NH	NH	Two Lane	Four Lane
19	Sutnga	Kalain	62.00	NH	NH	Two Lane	Four Lane
20	Chagsari	Hajo	20.00	SH	SH	Two Lane	Four Lane
21	Hajo	Barpeta	45.50	SH	SH	Two Lane	Four Lane
22	Barpeta	Raha	26.00	SH	SH	Intermediate Lane	Lane Four
23	Baihata	Dumnichauki	30.00	NH	NH	Two Lane	Four Lane
24	Sibsagar	Jhansi	33.20	NH	NH	Two Lane	Four Lane
25	Jhansi	Jorhat	34.50	NH	NH	Two Lane	Four Lane
26	Daboka	Kothiatrli	13.50	NH	NH	Two Lane	Four Lane
27	Kothiatrli	Nagaon	20.00	NH	NH	Two Lane	Four Lane
28	Nagaon	Jakhalabandha	19.50	NH	NH	Two Lane	Four Lane
29	Mahar	Udarbond	31.20	NH	NH	Intermediate Lane	Lane Four
30	Silchar	Salchapa	17.60	NH	NH	Two Lane	Four Lane
31	Salchapa	Kalain	24.10	NH	NH	Two Lane	Four Lane
32	Kalain	Karimganj	37.00	NH	NH	Two Lane	Four Lane
33	Neelam Bazar	Kanai Bazar	11.00	NH	NH	Two Lane	Four Lane
34	Neelam Bazar	Karimganj	19.50	NH	NH	Two Lane	Four Lane
35	Yairpok	Imphal	16.50	SH	SH	Intermediate Lane	Four Lane
36	Imphal	Nungba	40.00	NH	NH	Two Lane	Four Lane
37	Fgolokganj	Bilasipara	45.50	NH	NH	Two Lane	Four Lane
38	Tangza	Paneri	15.00	MDR	MDR	Intermediate Lane	Four Lane
39	Orang	Dhekjaluli	10.00	NH	NH	Two Lane	Four Lane
40	Dhekjaluli	Tezpur	50.00	NH	NH	Two Lane	Four Lane
41	Tezpur	Jakhalabandha	24.00	NH	NH	Two Lane	Four Lane
42	Tinsukia	Chabua	13.00	NH	NH	Two Lane	Four Lane
43	Chabua	Lohamal	29.30	NH	NH	Two Lane	Four Lane
44	Lohamal	Dibrugarh	11.00	NH	NH	Two Lane	Four Lane
45	Dibrugarh	Moranhat	40.30	NH	NH	Two Lane	Four Lane
46	Moranhat	Sibsagar	38.00	NH	NH	Two Lane	Four Lane
47	Kanarbandha	Golaghat	28.00	SH	SH	Intermediate Lane	Lane Four
48	Numalighat	Bokakhat	33.20	NH	NH	Two Lane	Four Lane
49	Bokakhat	Amguri	26.00	NH	NH	Two Lane	Four Lane
50	Amguri	Jakhalabandha	32.50	NH	NH	Two Lane	Four Lane
51	Daboka	Lankapatti	13.00	NH	NH	Two Lane	Four Lane

Sl. No	Road Name		Category of road			No. of lanes	
	From	To	Length	Existing	Proposed	Existing	Proposed
52	Lankapatti	Lumding	26.00	NH	NH	Two Lane	Four Lane
53	Hatikuli	Khulurbond	24.70	NH	NH	Two Lane	Four Lane
54	Hatikuli	Lumding	49.00	NH	NH	Two Lane	Four Lane
55	Khulurbond	Mahar	19.50	NH	NH	Two Lane	Four Lan
56	Udarbond	Silchar	11.00	NH	NH	Two Lane	Four Lane
57	Silchar	Pailapool	21.00	NH	NH	Two Lane	Four Lane
58	Sevok	Gangtok	110.00	NH	NH	Four Lane	Four Lane
59	Changsari	Hajo	20.00	MDR	SH	Single Lane	Two Lane
60	Hajo	Barpeta	45.50	MDR	SH	Single Lane	Two Lane
61	Lakhimpur	Jorhat	71.50	SH	SH	Single Lane	Two Lane
62	Diphu	Lumding	32.00	SH	SH	Single Lane	Two Lane
63	Mokokchung	Chonghyimeri	16.50	SH	SH	Single Lane	Two Lane
64	Yairpok	Yangangpopki	10.00	MDR	MDR	Single Lane	Two Lane
65	Aizawl	Mamit	34.00	NH	NH	Single Lane	Two Lane
66	Mamit	Tukkalh	18.75	NH	NH	Single Lane	Two Lane
67	Tukkalh	Manpoi	17.00	NH	NH	Single Lane	Two Lane
68	Paneri	Udalguri	26.00	SH	SH	Single Lane	Two Lane
69	Itanagar	Sagalee	40.00	NH	NH	Single Lane	Two Lane
70	Wangla	Mon	10.00	NH	NH	Single Lane	Two Lane
71	Wangla	Bhalighat	35.00	NH	NH	Single Lane	Two Lane
72	Mokokchung	Zuhenboto	9.00	NH	NH	Single Lane	Two Lane
73	Chonghyimeri	Moriani	22.10	SH	SH	Single Lane	Two Lane
74	Pumi	Yangangpopki	22.00	MDR	MDR	Single Lane	Two Lane
75	Tarong	Yairpok	38.50	SH	SH	Single Lane	Two Lane
76	Nungba	Bishnupur	36.50	NH	NH	Single Lane	Two Lane
77	Bishnupur	Nongthoukhong	16.00	NH	NH	Single Lane	Two Lane
78	Nonghoukhong	Churchandpur	24.00	NH	NH	Single Lane	Two Lane
79	Zobawk	Seling	33.75	NH	NH	Single Lane	Two Lane
80	Zobawk	Keitnnikawn	41.25	NH	NH	Single Lane	Two Lane
81	Rongjeng	Nengkhra	42.00	NH	NH	Single Lane	Two Lane
82	Rongjeng	Damra	44.00	NH	NH	Single Lane	Two Lane
83	Damra	Krishnai	37.00	NH	NH	Single Lane	Two Lane
84	Dimapur	Diphu	34.50	SH	SH	Single Lane	Two Lane
<b>Grand Total</b>			<b>2557.15</b>				

The Asian Highways project covering a road network of about 65,000 km. and passing through 15 countries is lying dormant for more than 40 years. The objective of this project is to promote and coordinate development of international road transport for connecting all the capital and industrial cities, sea routes and places of tourist and commercial interests in the Asian region. The proposed roads in the Asian Highways project would connect the NER not only with Bangladesh



but also with other East Asian countries. This will give a big boost to the development of this region. This project, therefore, needs to be pushed through for implementation.

Keeping in view the geographical location of NER, its difficult terrain conditions, exploitation of untapped resource potential and overall economic development of the region, provision of an access corridor through neighbouring countries is essential. This access corridor will be possible with the cooperation of the Governments of Bhutan, Bangladesh and Myanmar.

The potential corridors identified through adjacent countries are :

**(a) Through Bhutan**

By connecting Jashingang Dzong (in Bhutan) with Arunachal Pradesh and Assam three alternate routes will be developed. These routes are :

- (i) Tawang (in Arunachal Pradesh) - Jashingang Dzong (in Bhutan) - Darranga (in Assam).

This will provide an alternate route between Arunachal Pradesh and Assam.

- (ii) Tawang (in Arunachal Pradesh) - Jashingang Dzong-Mongar-Dzong-Kogkha-Tongsa Dzong-Shemgang Dzong-Gelekphu (all in Bhutan - Rani Khata (Assam). This provides another alternate route between Assam and Arunachal Pradesh.

- (iii) Tawang (in Arunachal Pradesh) - Jashingang Dzong-Mongar-Dzong-Kogkha - Jongsang Dzong - Punakha - Gasa - Dotanang - Pokangnag - Thimphu - Kyapcha - Chanakha (all in Bhutan) - Jairgaon (West Bengal).

**(b) Through Bangladesh**

Connecting Meghalaya with Bangladesh at Dauki, Shella, Baghmara, Burengapara and Mahendraganj and similarly Tripura at Kalkalighat, Kamalpur, Khowai, Ranir Bazar and Sabrum will develop international linkages with Bangladesh. This will facilitate alternate routes between these two states, with rest of the country, access to the Asian Highway network and connectivity of major cities in Bangladesh. Potential routes between Meghalaya, Bangladesh, Assam and Tripura are:

- (i) Dauki (Meghalaya)-Jaintipur-Sylhet-Fenchuganj-Silua (all in Bangladesh) and Kalkaliganj (Assam)
- (ii) Shella (Meghalaya)-Sylhet-Fechuganj-Silua (all in Bangladesh) and Kalkaliganj (Assam)
- (iii) Dauki (Meghalaya) - Jaintipur-Sylhet-Fenchuganj-Kamalganj (all in Bangladesh) and Kamalpur (in Tripura)
- (iv) Shella (Meghalaya) - Sylhet-Fenchuganj-Kamalganj (all in Bangladesh) and Kamalpur (in Tripura)
- (v) Dauki (Meghalaya) - Jaintipur-Sylhet-Fenchganj-Kamalgan-Shahistaganj (in Bangladesh) and Khowai (Tripura)

- (vi) Shella (Meghalaya)-Sylhet-Fenchuganj-Kamalganj-Shahistaganj (in Bangladesh)- and Khowai (Tripura)
- (vii) Dauki (Meghalaya)-Sylhet-Habiganj-Shahistaganj (in Bangladesh) and Khowai (Tripura)
- (viii) Shella (Meghalaya)-Sylhet-Habiganj-Shahistaganj (Bangladesh) and Khowai (Tripura)
- (ix) Bagmara (Meghalaya)-Durgapur-Jari Jhanjali-Shamganj-Bhairb Bazar-Camila, Ramgarh (Bangladesh) and Sabrum (in Tripura)
- (x) Burengapura (Meghalaya) - Piarpur-Begunbari-Dhaka-Camila-Ramgar (all in Bangladesh) and Sabrum (Tripura)
- (xi) Mahendraganj (Meghalaya)-Nandia-Piarpur-Begunbari-Dhaka-Camila-Ramgarh (all in Bangladesh) and Sebrum (Tripura)

By linking Mizoram at Tiabung with Bangladesh, a much shorter route between Mizoram and Tripura (at Sebrum) could be developed. Apart from this, alternate routes between Mizoram and Meghalaya can be developed through Bangladesh (via Chittagong and Dhaka)

### (c) Through Myanmar

International connection of Arunachal Pradesh (at Pangsua pass), Nagaland (at Lungwa), Manipur (at Tamu) and Mizoram (at Champhai) with Myanmar will help in developing the international border trade.

## 7.1.2 Railways

In general, rail is the best method of mass transportation in the country, but rail networks are generally difficult and expensive to set up in hill areas, which accounts for the absence of railway lines in Arunachal Pradesh, Manipur, Meghalaya, and Mizoram. Tripura and Nagaland have railway routes in their plain areas, while Assam has a large railway network. Even so, the track density in terms of both population and area even in the plain areas of the North East is much lower than the national average (Table 7.6A in Annexure 7.1).

There has been only a marginal or no increase in the density of tracks per lakh of population in most of the states in the region as compared to an almost five-fold increase at the national level. Even the increase witnessed in the plains of Assam is much lower than the national average. It may also be noted that most of the states in the region do not have a rail line connecting them to any major rail junction<sup>8</sup>. Finally, while there has been some conversion of metre gauge to broad-gauge, Assam still has a large number of single-track routes which cannot accommodate any increase in rail frequencies.

There are some obvious short-run projects which need completion at the earliest. For example, the Bogibeel rail bridge across the Brahmaputra was commissioned in 1996 as a ten-year

<sup>8</sup>In the field trips, states like Sikkim and Arunachal, which have no alternate access to the rest of the country, noted that movement outside their state is crucially dependent on the law and order situation in adjoining states. Local disturbances in neighbouring states can severely disrupt bulk supplies carried by rail. As noted in the Sixth Sectoral Summit of the NEC, while the railways have drawn up a plan to bring the rail lines to each state, the funding pattern and time deadlines need to be clearly specified.



project but the work started only in 2002. This rail-cum-road bridge has implications for connectivity not only for Assam but also for Arunachal and Meghalaya. (Shukla Commission Report, 1998) Similarly, there is an urgent need for a rail link into Sikkim. The more important issue from the long-term point of view is strategic planning that will develop the rail network with the aim of increasing inter-state connectivity. In addition, rail connectivity has to be integrated with developments in the other avenues of transport being proposed for the NER as a whole (World Bank 2006). Some useful rail links are already under planning and a few of them have almost been completed and are likely to be broadgaged. These are Jiribum to (near) Imphal and Dimapur to (near) Kohima. Another line from Azara (near) Guwahati airport to Bunnia in Meghalaya is in progress. Another line which is an extension from Kumarghat to Agartala in Tripura is near completion.

For Meghalaya, it is desirable to open a broad gauge railway line from Lumding in North Cachar Hills in Assam to Jowai in the Jaintia Hills. A broad gauge railway line along the Indo-Bangladesh international border in Meghalaya linking the western and southern parts of Assam can also be considered. This will open the mineral resources of Meghalaya for development.

In high level consultations with the Ministry of Railways, State Governments, the North Eastern Council and Ministry of DONER in 2007, the Ministry of Railways had reported the status of various important projects going on in the North Eastern Region. Nine of them are new lines – (i) Kumarghat to Agartala, (ii) Jiribam to Tupul, (iii) Dimapur to Zubza, (iv) Azra to Byrnihat, (v) Dudhnoi to Depa, (vi) Harmuti to Itanagar, (vii) Mahilaguri to Jogighopa, and (viii) Bogibeel Rail-cum-Road Bridge; four are for gauge conversion - Lumding - Silchar, Rangiya -Murkongselek, Kathakal - Bairabi, Haibargaon - Mairabari and Senchoa Junction - Silghat Town and one is for doubling the line – New Guwahati – Digaru. A very legitimate demand of the region and the expectation of the citizens is also that all the state capitals of NER should be connected by rail lines. As indicated in Table 7.6, on completion of all the ongoing/sanctioned works, railway lines will link the state capitals of Arunachal Pradesh, Nagaland, Manipur and Tripura. However, projects for connecting Aizawl (Mizoram), Shillong (Meghalaya) and Gangtok (Sikkim) are yet to be sanctioned. For Aizawl, a project for a rail line from Bairabi to Sairang has been included in the railway budget of the Railway Ministry. For Shillong, work on Azra-Byrnihat has been taken up and from Byrnihat to Shillong, work on a survey has been sanctioned. For connecting Gangtok, a survey has been completed from Sivok-Rangpo whereas work on a survey from Rangpo to Gangtok has been sanctioned. Information about status of connection of state capitals in NER by railway line are given in Table 7.7:



**Table 7.6 : STATE-WISE STATUS OF PROJECTS (in June, 2007)**

**Status of Projects in Assam**

Project	Year of sanction	Length (in km.)	Cost (in Rs. Crore)	Target
Bogibeel Rail-cum Bridge (New Line)	1997-98	73.00	1767.37	2011-12
Lumding-silchar-Kumar (Gauge conversion)	1996-97	367.79	1676.31	March 2010 ghat
Rangia-Murkongselek Conversion)	2003-04	510.33	912.70	2011-12(Gauge
Zara to Byrnihat (New Line)	2006-07	30.00	200.00	2011-12
Other Projects				
New Mainaguri-Jogighopa (New Line)	2001-02	257	1022	2011-12
Dhudhnoi to Depa (New Line)	1992-93	15.5	22.33	2010-11
Harmuti to Itanagar (New line)	1996-97	33	156	2011-12
Lumding-Dibrugarh-Bongaigaon	1993-94	628	882.11	Sanchoa-Siliguri-New Silghat Sept. 07
New Jalpaiguri-siliguri-New Bongaigaon including Branch lines (Gauge conversion)	1997-98	417	890	Alipurduar_ Bamanhat August, 2007 balance 09-09
Katakhal to Bhairabi conversion)	1997-98	84	88.7	March, 2010 (Gauge
Guwahati-Digaru Patch	2007-08	30	99	March, 2010 Doubling

**Status of Projects in Meghalaya**

Project	Length (in km.)	Cost (in Rs. Crore)	Target
Azara-Byrnihat National Project)	30	200	2011-12
Dhudhnoi-Depa	15.50	22.33	2010-11

**Feasibility study for extending rail line upto Shillong is under process**

Project	Length (in km.)	Cost (in Rs. Crore)	Target
Kumarghat to Agartala (New Line) *	109	879.99	December, 2007
Lumding-Baraigra-Kumarghat (Meter Gauge conversion)	367.79	1676.3	March 2010

Note: \*Kumarghat-Manu (21 km.) commissioned in 2002



Project	Length (in km.)	Cost (in Rs. Crore)	Target
Agartala—Akhaura	5.4	27.27	Completed in July 2000
Agartala-Sabroom	110	556.88	Completed in March 2005

#### Status of Projects in Mizoram

Name of Survey	Length (in km.)	Cost (in Rs. Crore)	Target
Katakhal to Bhairabi	84	887	March 2010
Bhairabi-Sairang	51.38	519.34	Completed

#### Status of Projects in Manipur (National Project)

Name of survey	Length (in km.)	Cost (in Rs. Crore)	Target
Jiribm-Tupul (National Project) @	98	1850	2011

Note: @ The cost of the project has increased from Rs. 728 Crore to Rs. 1,850 Crore due to raising of alignment needed to negotiate the submergence zone of proposed Tapaimukh dam and to finally connect Imphal. During FLS it was found feasible to extend the line from Tupul to Imphal at a further additional cost of about Rs. 500 Crore involving a tunnel of 8 km.

#### Status of Projects in Arunachal Pradesh

Project	Length (in km.)	Cost (in Rs. Crore)	Target
Harmuti to Itanagar (New line)	33	156.00	2011-12
Rangia-Murkongselek (Gauge Conversion) 2011-12		510	913.00

#### Name of Survey

Murkongselek to Passighat	30	Rs. 122.93 Cr. (-)	2011-12 1.99 per cent
Rupai to Parashuramkund Completed		50	913.00

#### Status of Projects in Nagaland

Project	Length (in km.)	Cost (in Rs. Crore)	Target
Dimapur to Zubza @ (Kohima) New Line (National Project)	88	850	2014-15
Lumding-Baraigram-Kumarghat (Gauge conversion)	367.79	1676.3	March, 2010

Note:@ There is a demand to extend the line upto Kohima

### Status of Surveys in Sikkim

Name of Survey	Length (in km.)	Cost (in Rs. Crore)	Target
Sivok (Gulmakhola)-Singtam	59.65	1099.79(-) 33.954	Completed
Sivok to Rangpo	55	1676.3	July 07

There is persistent demand to connect Gangtok with rail network

### National Projects in North East Region

Sl. No.	Project	Cost (in Rs. Crore)	Target
1.	Jiribam-Imphal Road (Tupul)	728.0	2010-11
2.	Kumarghat-Agartala	880.0	2007-08
3.	Lumding-silchar-Kumarghat	1676.0	2009-10
4.	Azra-Byrnihat	200.0	2011-12
5.	Dimapur-Zubza (Kohima)	850.0	2014-15
6.	Bogibeel railway cum road bridge	1767.0	2011-12
7.	Rangia-Murkongselek	915.7	2011-12
<b>Total</b>		<b>7016.7</b>	

Table 7.7: Status of Rail Connectivity to State Capitals as on 20.3.2008

Sl. no.	Name of state	Capital city	Name of project	Remarks	
1.	Assam	Guwahati		Already connected	
2.	Tripura	Agartala	Kumarghat-Agartala new line (109 km.)	Sanctioned and in progress. Expected to be completed in March, 2008	National Project
3.	Manipur	Imphal	Jiribam-Imphal road (98 km.)	Sanctioned and in progress. Expected to be completed by March 2012 upto Imphal. Proposal for extension of line up to Imphal is to be processed.	National Project
4.	Arunachal Pradesh	Itanagar	Harmuti-Itanagar (33 km.)	Final location survey completed has been Harmuti to from and land Naharigun taken up. acquisition	
5.	Nagaland	Kohima	Dimapur-Kohima (Zubza) (88 km.)	Final location survey taken up.	National Project

Sl. no.	Name of state	Capital city	Name of project	Remarks	
6.	Mizoram	Aizwal	Bhairabhi-Sairang (52 km.)	New work included in budget 2008-09.	National Project
7.	Meghalaya	Shillong	Guwahati-Shillong	Work in Guwahati (Azra-Byrnihat (30 km.) taken up. Survey sanctioned for Byrnihat-Shillong (60 km.).	Azra Byrnihat declared a National Project
8.	Sikkim	Gangtok	Sivok-Rangpo (53 km.)	Sent to Planning Commission for in principle approval. Survey sanctioned for Rangpo Gangtok (60 km.).	

There are 14 ongoing projects and two new projects (Bhairabi-Sairang and Agartala-Sabroom) have been included in 2008-09 (Table 7.8). Further nine projects, including the earlier seven, in NER have been declared as “National Projects”. There is a move to set up a non-lapsable dedicated fund called the North East Rail Development Fund for smooth flow of funds to complete these projects in a time bound manner. Funding will be 25 per cent from the Railways GBS and the balance 75 per cent as additionality from the Ministry of Finance.

**Table 7.8 : Current Status (as on 20.3.2008) and Timelines of On-going Projects**

Name of the project	Year of inclusion in budget	Km.	Latest anticipated cost (Rs.Crore.)	Exp. Upto March, 2008 (Rs.Cr.)	Outlay 09-09 (Rs.Cr.)	Time Line	Status
<b>NEW LINES</b>							
Kumarghat-Agartala (Tripura)	1996-97	109	880	756.15	10	June, 2008	Declared National Project. Line being extended to Sabroom.
Jiribam-Imphal (Manipur) National Project	2003-04	97.9	727 (upto Tupul revised cost for alignment upto Imphal is Rs. 2,300 Cr.	14.91	25	Jiribam Tupul March 2012) upto Imphal March, 2014	Declared National Project. Work started on first 10 km.

Name of the project	Year of inclusion in budget	Km.	Latest anticipated cost (Rs.Crore.)	Exp. Upto March, 2008 (Rs.Cr.)	Outlay 09-09 (Rs.Cr.)	Time Line	Status
Dimapur-Zuzba (Kohima)	2006-07	88	850	0	10	2014-15	Declared National Project. Final location survey started.
Harmuti-Itanagar (Assam, Arunachal Pradesh)	1996-97	33	160.48	0	29.98	March, 2011	FLS in progress. Part estimate upto Naharigun sanctioned. Land acquisition in progress.
Boghbeel bridge (Assam)	1997-98	73	1767	929.33	75	March, 2012	Approaching completion. Tender for sub-structure under finalization.
Dudhnoi-Depa (Assam and Meghalaya)	1992-93	16	89.04	0.5	0.02	Not fixed	The survey for alternative alignment from Dudhnoi to Mendhipathar as suggested by State Government has been completed.
Azra-Byrnihat (Assam, Meghalaya)	2006-07	30	200	0	0	2014-15	Declared National project. FLS in progress.
New Moinaguri-Jogighopa (West Bengal, Assam)	2000-01	257	894	135.73	55	Not fixed	Land acquisition, earthwork, and bridges taken up.
Bhairabhi Sairang (Aizawl) (Assam-Mizoram)	2008-09	51.38	619.34	0	0.01	Not fixed	Declared National Project.
Agartala-Sabroom (Tripura)	2008-09	110	813.34	0.01	0.01	Not fixed	Declared National Project.





**Current Status (as on 20.3.2008) and Timelines of On-going Projects**

Name of the project	Year of inclusion in budget	Km.	Latest anticipated cost (Rs.Cr.)	Exp. Upto March, 2008 (Rs.Cr.)	Outlay 08-09 (Rs.Cr.)	Time Line	Status
<b>GAUGE CONVERSION</b>							
Lumding Silchar Jiribam & Badarpur to Kumarghat (Assam and Tripura)	1996-97	368	1676	832.51	138	March, 2010	National Project. Work started at 68 sites – affected due to terrorist activities. Security cover being pursued
Rangia-Murkongselek with linked fingers (Assam and Arunachal Pradesh)	2003-04	510	915.7	9.2	50	March, 2012	National Project. Work in progress.
Kathakal-Bhairabi (Assam, Mizoram)	1997-98	84	88.70	16.95	15	March, 2010	Earthwork, bridge work. etc. taken up. The conversion will be done along with Lumding-Silchar Project
Lumding-Dibrugarh with linked fingers, Haibargaon-Mirabari and Senchoa Silghat Town Assam	1993-94	734	949	804	30	Main line completed. Senchoa-Silghat March, 2008 balance March, 2009	Balance work in progress.
New Jalpaiguri -New Bongigaon with branch lines (West Bengal, Assam)	1997-98	419	960.48	853	30	Main line and alipurduar -Bamanhat completed. Fakiragram -Dhubri December, 2009	Work nearing completion.

### Current Status and Time Lines of On-going Projects (AS ON 20.3.2008)

Name of the project	Year of inclusion in budget	Km.	Latest anticipated cost (Rs.Cr.)	Exp. Upto March, 2008 (Rs.Cr.)	Outlay 08-09 (Rs.Cr.)	Time Line	Status
<b>DOUBLING OF LINE</b>							
New Guwahati -Digaru (Assam)	2007-08	30	99.84	0.94	50	March, 2010	Work in progress.

Some details of the planned rail network in NER and the expected costs are given in Annexure 7.2.

**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 and Sadiya;
- (c) Jorhat and North Lakhimpur via Majuli; and
- (d) Dhubri to Phulbari in Meghalaya.

Construction of bridges across river Brahmaputra requires huge investment. Moreover, (b) and (d) are not on the NH and need to be taken up outside NH programme.

To provide increased connectivity between North and South Guwahati, NHAI has already prepared DPR for construction of an additional 3-lane road bridge at about 40m downstream of the existing rail-cum-bridge at Saraighat (Guwahati) on NH31 as part of the East-West corridor. The corridor is to be completed by 2008.

Besides these major projects for bridges 4,917 bridges have been identified by the states. A number of roads are sub-optimally utilized for want of bridges. The length of these bridges roughly works out to 1,17,535 m. The construction of these bridges would need funds to the extent of Rs.6,486 crore. There is immediate need to locate the funds for implementation of these projects to make the roads fit for effective communication. The state-wise requirements of bridges and fund requirement for their construction is given at Table 7.9.



Table 7.9 : Summary of Bridges to be Constructed

S.No.	State	Total Number of Bridges	Length/ Span in mtrs.	Approximate cost (Rs. in lakh)
1	Arunachal Pradesh	41	1328.35	6598.58
2	Meghalaya	390	7267.19	42753.91
3	Assam	4359	102844.49	565916.00
4	Manipur	7	175.50	1614.60
5	Mizoram	57	2984.30	15429.15
6	Nagaland	15	380.00	2914.02
7	Sikkim	23	1170.00	6610.00
8	Tripura	25	1386.00	6770.00
	<b>Total</b>	<b>4917</b>	<b>117535.83</b>	<b>648606.26</b>

### 7.1.3 Air

The terrain of the region and very tenuous land link with the rest of the country makes air connectivity a *sine qua non* for trade and commerce, tourism, realization of the potential for horticulture and floriculture in the region, promotion of higher and technical education and even for reducing the image deficit that the region suffers from. Air connectivity is generally useful for high-end passenger traffic and high-value freight (such as plants, flowers and valuable documents). In general, air connectivity is also expensive in the hilly areas because of the terrain, which is the reason for the paucity of airports in other hill areas in the country: (most have versions of a helipad). In NER, air travel has been made possible by central subsidies for air travel to and from NER (excluding Assam). Despite this, air connectivity was extremely unreliable prior to 2002 as the limited traffic made the use of Boeing jets uneconomical and led to irregular flight schedules. However, since 2002 the introduction of smaller ATR planes has made flights within NER somewhat more reliable though Kolkata still seems to be the hub rather than Guwahati. On the other hand, Guwahati seems to be more the natural hub for air traffic within NER. At present only Meghalaya and Sikkim have no full-fledged airports.

Air connectivity needs substantial investments and participation from both the Government and private investors. The Sixth Sectoral Summit of NEC on Air Connectivity in Aizawl declared inter-alia the objective of “operationalizing upto 50 airports/airstrips in the North Eastern Region by the end of the Eleventh Five Year Plan, and providing upto 600 flights per week within the region, by using the appropriate type of aircraft, making the required improvements in existing airports/airstrips in a time-bound manner”.

Since the opening of the skies to private airlines in India, the North East has witnessed a quantum increase in the number of flights and passengers (Table 7.10).

**Table 7.10 : Growth of Flights in N-E**

Airline	Freq/week (Departures/week)		
	WS 06	SS 07	WS07
Indian Airlines	27 (71)	39 (94)	41 (98)
Alliance Air	83 (170)	72 (148)	73 (155)
Jet Airways	38 (105)	38 (105)	38 (105)
JetLite	21 (58)	14 (42)	14 (42)
Air Deccan	56 (133)	68 (207)	61 (193)
Kingfisher Airlines	13 (26)	27 (54)	27 (48)
Spicejet	7 (28)	7 (14)	7 (14)
IndiGo	14 (42)	25 (64)	27 (74)
<b>TOTAL</b>	<b>259 (633)</b>	<b>290 (728)</b>	<b>285 (729)</b>

**Passenger Traffic North East Region**

YEAR	In Nos.	Per cent change
2004-05	1447453	10.8per cent
2005-06	1620880	11.9per cent
<b>2006-07</b>	<b>2272193</b>	<b>40.2per cent</b>

State Governments are providing helicopter services at subsidised rates in Arunachal Pradesh, Sikkim, Tripura, Nagaland and Meghalaya. Flights on some commercially unviable sectors are being provided with viability gap funding by NEC to operators. Despite an increase in the number of flights and passengers, for equitable dispersal of connectivity, gap funding by Governments on commercially unviable routes and strict enforcement of DGCA's Route Dispersal Guidelines, 1994 will need to be strictly enforced in the foreseeable future. An indication of the increasing commercial interests in the region by private operators is the fact that the Government granted NOC to three operators to run scheduled/non-scheduled air services in the North East in 2007.

The development of existing airports, operationalization of non-operational airports and construction of greenfield airports assume great importance. There are 11 operational airports, 11 non-operational and three proposed greenfield airports - Itanagar, Tawang and Pakiyong (Gangtok) - Amongst the operational airports, only Agartala and Guwahati have night landing facility. In the region today there are no operational airports in Sikkim and Arunachal Pradesh. Instrument Landing Systems are only available in Agartala, Dibrugarh, Dimapur, Guwahati and Imphal. Clearly, all major operational airport need upgradation, inter-alia, in better navigational systems, expansion of terminals, extension and strengthening of runways and control towers. NEC and the Airport Authority need to work in a time bound manner to complete all the pending upgradation proposals as per their MoU in the Tenth Plan. Enhanced budgetary support, quicker land acquisition and negotiations where land is not privately owned and in some cases, coordination and cooperation from defence authorities are required for comprehensive airport development.



Status of the three greenfield airports is:

**a) Pakyong airport – Gangtok, Sikkim for ATR 72 Aircraft**

- Planning Commission, Government of India has concurred the funding of the project on 90:10 basis.
- Estimated cost of project – 358.36 crore.
- Project likely to be completed in 36 months from the date of commencement of work after all approvals, PDC 2011.

**b) Itanagar – for ATR 72 Aircraft**

Consultant appointed by the Airport Authority of India (AAI) has submitted DPR for greenfield airport at Itanagar. The estimated cost of the project is approximately Rs. 515.17 crore. The report is being reviewed.

**c) Tawang (Arunachal Pradesh)**

Pre-Feasibility Study for construction of new greenfield airport at Tawang has been conducted by AAI and report submitted to the government. Approval of the Government of India is awaited.

Cheithu Airport (Kohima) has been found commercially unviable and the proposed site for Kokrajhar Airport is also unsuitable. A new site needs to be identified.

The non-operational airports are mostly airstrips of World War-II vintage. They are hampered by the small length of the runway and difficulties in expanding due to a hilly terrain. These difficulties are apart from their commercial viability. However, the imperative of developing the region necessitates public funding of infrastructure.

Smaller aircrafts, charters and helicopter services (especially for lifting patients) and combo aircrafts (can be used both for passengers and cargo) need to be promoted. Intra-regional linkages are extremely poor, (especially linkages between the State capitals, connections to upper Assam and beyond and connection between the southern part of the North East and the northern part of Assam and Arunachal). A dedicated regional airline can provide a solution with smaller aircraft operating from smaller airstrips. Steps are already underway though results are uncertain. The Government needs to continue to display firmness in making Guwahati an airport hub. Cargo transport facilities from Guwahati need further improvement.

Improved links to international neighbours is a priority area under the Look East initiative. Guwahati presently has a sole link to Bangkok. Bangladesh, Bhutan, Myanmar and TAR should be connected to Guwahati. Another international airport for the southern part of NER in Agartala can be prioritized. Roads and railways are more capital intensive and cause far more environmental disruption than air connectivity. For the special situation of the North East, there is no alternative but to make air connectivity a very high priority.

Air traffic in NER accounts for less than 1 per cent of all traffic in the top 46 airports in India (Table 7.7A in Annexure 7.1). In fact, barring airports in Assam (Bagdogra and Guwahati),



only Agartala (Tripura) and Imphal (Manipur) are in the top 46 airports list, and that due to limited alternative access to the latter states. On the other hand, Sikkim has no airport and the heavy tourist traffic for Gangtok comes via the rail head at Siliguri or the airport at Bagdogra. Bagdogra Airport can be declared as an international airport. It can then connect Bhutan, Bangladesh and Nepal thereby facilitating tourist inflow from SAARC countries. What is even more problematic in NER is that there is no direct connectivity between state capitals and all movements have to be via Guwahati. In fact, in some cases one may actually have to fly from one state to the other via Kolkata. Any attempts to build airports in the NER states must grapple with the twin issues of cost of travel and rationalization of air routes (World Bank, 2006).

### 7.1.4 Inland Water Transport

Until the construction of roads, inland waterways in the Brahmaputra and the rivers in the Barak Plains were the commonly used medium of transport. During British rule, as the tea industry grew, these rivers became important carriers of trade. NER has about 3,839 km. of navigable river routes, with the Brahmaputra having the longest navigable stretch in the region (Table 7.8A in Annexure 7.1). Other important rivers are Buridhing, Katakhal, Subansiri, Disang and Gangagdar. Most of the waterways in NER are in Assam, and are used for ferry, commercial and rescue services and as crew-training centres. Most of the cargo is transported on the Brahmaputra and consists mainly of tea, coal, bamboo, rice, jute, sugar and urea (Table 7.9A in Annexure 7.1). The movement of cargo on the Brahmaputra grew from 29,414 tons in 1996-98 to 7,91,522 tons in 2003-04 (Table 7.10A in Annexure 7.1). Most of the ferry services are in Assam.



Shri Tarun Gogoi, Chief Minister of Assam Visiting Majuli Island in Assam



Inland water transport (IWT) offers a shorter and cheaper route for transport of bulk commodities and project cargo (Table 7.11). It is operational even during the flood season and offers large employment potential. The development of IWT in NER is a strategic and economic imperative. The Brahmaputra river from Dhubri to Sadiya (891 km.) was declared as National Waterway-II in 1988. Declaration of Barak River from Lakhimpur to Bhanga (121 km.) as National Waterway-VI is under process. On NW-II, which will become fully functional by March 2009, IWAI has taken up river conservancy works (Rs.12.30 crore) targeted for completion by March, 2008, maintenance of floating terminals (Rs.1.96 crore) at Dhubri, Jogighopa, Pandu, Tezpur, Silghat, Jamguri, Neamati, Bogibeel, Saikhowa and Sadiya, coal handling terminal (Rs.5.30 crore) at Jogighopa, night navigational aids (Rs.1.28 crore) from Dhubri to Pandu, 24 hours navigation facilities including setting up of DGPS stations (Rs.18.77 crore) at Jogighopa, Tezpur and Dibrugarh and construction of a permanent terminal (Rs.67.74 crore) at Pandu. Upstream cargo from Kolkata to Pandu mainly includes bitumen, steel, pipes, cement, detergent and batteries. Downstream cargo on NW-II includes gypsum, tea, jute, coal and diesel (Numaligarh Refinery). The potential is much more. Cargo moment on NW-II is projected to increase from 0.75 btkm. to 4.87 btkm. by 202425.

**Table 7.11: Water Routes on which Assam IWTD Operates Ferries**

Sadia-Saikhowa	Connected with Arunachal Pradesh directly
Neamati-Kamalabari	Connected with Nagaland by the shortest route
Jaleswar-Dhubri	Connected with Meghalaya by the shortest route
Dhubri-Fakirgang	

Source: *World Bank* (2006).

In recent years there has been an attempt by IWTD, Assam to provide passenger ferry services. It has introduced 32 cargo cum passenger ferry services on the Brahmaputra and its tributaries where no other mode of transport is available (Table 7.12). A project to open 88 additional such ferries is under implementation. Other projects under NEC are working to improve river channels (World Bank, 2006).

The major strength of inland water transport in the plain areas of NER is the presence of several, perennial rivers, which present the cheapest mode of transportation generating the least amount of pollution<sup>9</sup>. Given the costs of expanding the other modes of transportation in the region, inland water transport could present a viable, cost-effective alternative in the plain areas. Improved inland water connectivity in the North East would increase employment opportunities and tourism-related activity in the region. Improved connectivity would also lead to the opening of inter-country routes for trade and commerce. The lack of facilities for night navigation and mechanical handling and insufficient cargo vessels and terminals will need to be addressed.

**Table 7.12: Inland Water Transportation Vessels with Valid Certificate of Survey in NER: 1998 to 2004 on March, 31**

State	Year	Self-Propelled				Total Pushers
		Cargo	Passenger	Cargo-cum-	Tugs Passenger	
Assam	2001	8	-	32	-	39
	2002	8	-	32	-	39

Source: *indiastat.com*

<sup>9</sup>This section is based on World Bank Report (2006) Chapter 10

One of the problems of NER is the difficult access from the rest of the country. Consequently, commodities transported by land tend to be fairly high in cost. It is here that the river network can be used to transport commodities into NER. The list of goods for which river transportation could be effectively used includes coal, petro-chemicals, fertilizers, cement, tea, forest products and other bulky items (for more details see Table 7.11A in Annexure 7.1). In this context it will be useful to look at the Working Group on Shipping and Inland water Transport (2006) Report of the Eleventh Five Year Plan.

The details of expenditure incurred by IWAI for the first four years of the Tenth Plan under these heads is given in Table 7.13.

**Table 7.13: Budgetary Support and Funds for NER Areas**

Schemes/budget head	Approved outlay	Approved yearly	Amount spent (2002-03 to 2005-06)
1 Grant to IWAI (NW-1, NW-3 and other projects)	319.83	165.65	125.69
2 North Eastern Areas (NE Pool) (NW-2, Indo-Bangladesh Protocol Route, Barak)	235.00	129.20	96.45
3 Subsidy (IVBSS + LISS)	45.00	48.00	8.95
4 Technical Studies and R&D	8.00	4.00	4.24
5 Centrally Sponsored Scheme	20.00	16.00	41.34
<b>Total</b>	<b>626.83</b>	<b>362.85</b>	<b>285.68</b>

Source: Planning Commission (2006).

From Table 7.13, we infer that the investment of Rs. 235 crore. for development of IWT sector in four years is not a very satisfactory figure. Also, the budget allocated to IWAI at the yearly level could not be utilized fully. Hence, it is necessary that suitable measures be taken up for increasing the absorption capacity of IWAI on a priority basis. In other words, major organizational strengthening of IWAI is required.

Major transport initiatives taken by the Planning Commission listed in the Approach Paper to the Eleventh Five Year Plan are given in the Box 7.1.

### 7.1.5 The Way Forward

#### Box 7.1 Transport Initiatives in the North East

Infrastructure, particularly transport infrastructure, is crucial for the socio economic development of the North Eastern States. Improvement of transport infrastructure would necessitate concerted and multipronged action covering all modes of transport in the region - roads, railways, civil aviation and inland water transportation. Recognizing the criticality of developing the vast road network in NER, various road development programmes, including SARDPNE would be taken up at an accelerated pace. These schemes/programmes, apart from

### *Box 7.1 contd*

augmenting the capacity of high-density corridors, will result in provision of improved 4-lane or 2-lane (with paved shoulders) National Highway link to all state capitals. In addition, all district headquarters will be connected through National Highways either directly through 2-lane National Highway or 2-lane state road facility. High priority is being accorded to converting the arterial network of Railways to Broad Gauge (BG) and almost the entire Metre Gauge (MG) network in the North East region will be converted to BG in the region during the Eleventh Five Year Plan period. Action will be taken to provide rail link to Meghalaya and Sikkim. With this, all the North Eastern States will be linked with a BG line. Efforts will also be made to provide rail link to all state capitals in NER. Construction of three greenfield airports at Pakyong in Sikkim, Itanagar in Arunachal Pradesh and Cheithu in Kohima should be completed expeditiously. All state capitals in NER would have air connectivity. As a part of the modernization of airports in the country, four airports in the North East (Guwahati, Dimapur, Agartala and Imphal) are proposed to be modernized. With a view to improving intra-regional connectivity, infrastructure facilities at various airports will be strengthened and air services augmented. In order to harness the maximum potential of inland water as an ideal mode of transport for low value, high volume commodities, river Brahmaputra National Waterway II, which provides trunk route connectivity to the region, will be made fully functional. Source: An Approach to the 11th Five Year Plan, 'Towards Faster and More Inclusive Growth', Planning Commission, Government of India, November, 2006.

### *7.1.5 The Way Forward*

- Developing a fairway to Pandu and the necessary infrastructure for full-time navigation.
- Developing the Aricha-Dhulian-Rajsahi-Dacca route for navigation to reduce the distance and time between Kolkata and the North East.
- Declaring the Barak river between Karimganj and Lakhimpur a national waterway, so that it can be developed on a priority basis.
- Developing river routes through Gomti-Meghana to explore the trade opportunity between Tripura and Bangladesh.
- Developing Tizu-Chindwini-Irrawady to promote trade between Nagaland and Myanmar.
- Following transit routes are to be activated as specified in the IWT Transit and Trade Protocol between India and Bangladesh.
- Kolkata - Haldia - Raimongal - Chalna - Khulna - Mongla - Kauhali - Barisal - Hizla - Chandpur - Narayanganj - Aricha - Sirajganj - Bahadurabad - Chilmari - Dhubri - Pandu and vice-versa.
- Kolkata - Haldia - Raimongal - Mongla - Kauhali - Barisal - Hizla - Chandpur - Narayanganj - BhairabBazar - Ajmiriganj - Markuli - Sherpur - Fenchuganj - Zakiganj - Karimganj and vice-versa.
- Rajshahi - Godagari - Dhulian and vice-versa.
- Karimganj - Zakiganj - Fenchuganj - Sherpur - Markuli - Ajmiriganj - Bhairab Bazar -



Narayanganj - Chandpur - Aricha - Sirajganj - Bahadurabad - Chilmari - Dhubri - Pandu and vice-versa.

- Cargo transportation to the North East through the Sunderbans and Bangladesh via NW-II and via the Meghna-Barak waterway system often follows a shorter route than that by the rail or road network.
- During the flood season, other modes of transport are often not in operation, and inland waterways are the only viable option for transportation of goods between the North East and the rest of India. Basic commodities such as foodgrains need to be transported to the North East during the flood season - inland waterways are highly suited for such bulk transport.
- Bulk commodities and large cargo used for industrial production and large scale construction projects can be transported through inland waterways from Kolkata/ Haldia. With access through the waterways in Bangladesh, transit route from Haldia port through Bangladesh to Assam and Tripura, linking to Chittagong sea port with southern tip of Tripura can then be feasible. This will provide tremendous gains in terms of reduced transportation, time and cost as well as for an alternative link for the NER with the rest of the country as well as other destinations in south-east Asia.
- Passengers and cargo are moved via inland water transport in both the organized and unorganized sectors. This mode of transport is essential for small or remote locations for the transport of agricultural and commercial products to and from regional markets and growth centres, especially during the monsoon and flood season.
- The increase in economic activity as a result of the development of inland water transport would create substantial employment opportunities.
- Opening of the Farakka-Dhulian-Rajshahi-Aricha route will further provide a direct link to the mainland through NWI.
- Development of the tributaries of the Brahmaputra like Dhansiri, Subansiri and Lohit is essential.
- Public-private partnerships for the development of fairways and infrastructure in IWT should be stressed.
- The Ministry of External Affairs should initiate the process for renewal of Indo-Bangladesh IWT protocol on a long-term basis and expeditious implementation of the Kaladan River multi-modal transport route from Mizoram to Sittwe port.
- IWAI to ensure that NWII is made fully operational within March, 2009 and expedite necessary approvals for declaration of Barak river (Lakhipur to Bhanga) as NWVI and take up development of the waterway on priority.
- IWAI to develop credible night navigation facilities on NWII to reduce travel time. Ministry of Shipping/IWAI to consider deputing a delegation abroad for studying effective methodology for providing night navigation facilities. To reduce manual handling of cargo, IWAI to consider providing mechanical handling of cargo.





- IWAI to consider proposal from the Government of Mizoram to link the Tlawng and Barak rivers to enable transport of cargo from Mizoram into the Barak Valley and further through the proposed NWVI.
- Ministry of Shipping/IWAI to take up the Tripura Government proposal for declaring Ashuganj as port-of-call during the next meeting with Bangladesh.

The development of IWT has been limited both by the lack of funds and the insurmountable nature of the Brahmaputra (World Bank, 2006). However, the newly constituted Brahmaputra Board should make an attempt to integrate IWT in the general framework of connectivity in NER, as IWT has implications not only for Assam but for other land-locked states like Arunachal.

## 7.2 Power

Almost every North Eastern state is deficit in power, which is important given the nascent state of industrial and other economic activities based on power in the region (Table 7.13A in Annexure 7.1). Further, while Arunachal is supposed to be self-sufficient in power it actually imports power from Assam, also a deficit state.<sup>10</sup> All the states need to develop their internal transmission grids to avoid incurring wasteful expenditure on wheeling power from the central grid. Basically, the NER states need to determine how they will transmit power within their states before estimating the amount of power they would sell to the national grid. Power consumption has remained virtually stagnant in most of the states over a period of about ten years (Table 7.14A in Annexure 7.1), with the exception of Meghalaya and Sikkim (which had an almost 200 per cent increase). In Manipur power consumption has actually declined and is stagnant in Assam. This obviously reflects the differential growth in economic activity in the NER states.

At present the states are not in a position to generate enough power even for their own requirements, even though power generation has increased substantially in every state after 1996-98. However, generation seems to be stagnant after 1999-2000 (Table 7.15A in Annexure 7.1). States like Meghalaya are in fact identifying less power-intensive areas like high-level tourism, IT sector, horticulture and so on as thrust areas in their industrial policy rather than large industrial projects.<sup>11</sup>

For the future, ambitious plans have been drawn up for making NER not only self-sufficient in power but also the 'power house' for the rest of the country. As can be expected the main source of power is likely to be hydel and the focus state would be Arunachal<sup>12</sup>, even though in Assam, the power supply source has changed dramatically in 2006 from thermal to hydel<sup>13</sup>.

In addition, since power projects are capital intensive, most of the commissioned projects

<sup>10</sup>In discussion with the study team, officials indicated that the lack of an internal grid in Arunachal prevents the evacuation of surplus power from one part of the state to another. Plans for a state transmission grid have been submitted to DONER and approval is awaited.

<sup>11</sup>Officials of the Meghalaya Government admitted that large-scale industrial plans for the state (cement, steel, minerals etc.) are not presently considered given the severe power constraint. In fact, captive power has to be shown before approval of private projects in mineral exploration.

<sup>12</sup>Discussion with officials on field trips indicated that there is some move to go back to thermal power because of the unreliability of hydel sources.

<sup>13</sup>See, for example, the Pasighat declaration, January 2007.

are (or would be) in the central sector or under public-private partnership (PPP) mode. Tables 7.16A and 7.17A in Annexure 7.1 show the increasing role of the centre in power generation in the NER states mainly implemented through NEEPCO. In Assam, for example, the big jump in 2006 relative to 2005 is entirely due to capacity created in central power projects.

As noted in the Pasighat Declaration, the total power potential in NER is about 50,000 MW. According to *NEC Vision 2020* the estimated hydro-power potential of Arunachal is around 50,000 MW. The state is expected to generate an additional 22,584 MW hydel power by 2020 in 166 hydel projects, of which only 88 MW is to be created under state projects, the rest will be under central and private projects. In the Twelfth Plan alone 15,251 MW of additional power is to be generated. Finally, about 42 per cent of the additional power is to be generated by private hydel projects.

The ambitious power generation plan may satisfy the requirements of the NER states, as they are entitled to free 12 per cent of power generated from central projects

However, from the long-run point of view, four problems need to be addressed. First, the large number of hydel projects envisaged for Arunachal will require compensatory afforestation under the Forest Conservation Act, 1980.<sup>14</sup> Given the large forest cover of the state, compensatory afforestation will have to be done elsewhere, and this issue has to be addressed now and not at the project stage.<sup>15</sup> Second, while<sup>15</sup> the state prefers 'run-of-the-river' projects, Assam has been asking for dams which also mitigate its flood problem (World Bank, 2006). Third, hydel power (particularly in the hills of NER) is crucially dependent on rainfall, which has been erratic in recent years. Finally, the low population density of hill states, and their far-flung villages mean high transmission losses. Yet, barring Nagaland none of the states has seriously investigated the use of relatively low-cost micro-hydel power for loads of up to 5 KW for domestic users (see Box. 7.2) (Pant, 2004).

### **Box 7.2 : Appropriate Technology in Power: A Case Study from the North East**

Nagaland recently experimented with small hydel generation units under the initiative of NEPED. The success of the experiment led to the extension of the scheme to other parts of the state through a grant from the Ministry of Non-Conventional Energy Sources.

The starting point of the experiment was the fact that most small entrepreneurs (small farmers, shop keepers, restaurants etc required only about 5 KW of power. (This is approximately the sanctioned power of middle-class homes in major metros and is sufficient to run heaters, lights, geysers etc.). The next step is to identify the power-generating turbine which would make economic sense. Small hydel power turbines are generally classified by their 'head' which defines how high the water supply reservoir must be in relation to the turbine to make it functional. Two types of turbines were identified, either requiring a 20-foot or a 6-foot 'head' of water.

The cheaper turbine with a 20-foot head would require a perennial mountain stream

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<sup>14</sup> The lower Subansiri dam has already encountered some objections from wildlife authorities.

<sup>15</sup> Other projects like the Gomti dam in Tripura should now be decommissioned.



with an ordinary reservoir of water at its mouth. By placing the turbine 20 feet below, power would be available for any unit located on the roadside 10 or 15 feet away. The basic cost of installing such a unit is about Rs. 30,000 including the cost of the turbine. The opportunity cost of this at even an 8 per cent commercial rate works out to about Rs. 200 per month. Who would not want guaranteed power at that cost without all the attendant problems (breakdowns, power cuts etc.) of a conventional centralized power system? The added advantage is that there is no maintenance cost for the system (as the study team found from someone running a roadside restaurant with such a unit). More importantly, the system was simple enough so its functioning could be handled by the owner or a roadside truck mechanic.

The state has, over the last few years, extended the experiment to a large number of small users.

As indicated earlier, NER has vast hydro power potential which is estimated at about 60,000 MW. Most of this potential lies in Arunachal Pradesh with only about 2 per cent of the potential being tapped so far. There has been very little addition in generation with shortfall in targets set for the Tenth Plan period (2002-07). There is also an imbalance between hydel and thermal power, both in terms of generation and availability in the region. However, a number of projects are ongoing in the region and are expected to improve the overall power availability in the region. The installed capacity is proposed to be doubled by the end of the Eleventh Plan. NHPC's Teesta Hydro- V (510 MW) power project in Sikkim has recently started generating power. The state is still included in the Eastern Power Grid and needs to supply power to the North Eastern region. The current installed capacity in the region as on 31-12-2006 was 2,520.30MW (effective output about 1,800 MW). The peak demand forecast by 2011-12 is estimated at 2,620MW and energy requirements at 13,649MU.

There have been inadequate investments in transmission and distribution grids in the North Eastern region. Four states, namely, Meghalaya, Manipur, Mizoram and Sikkim are connected

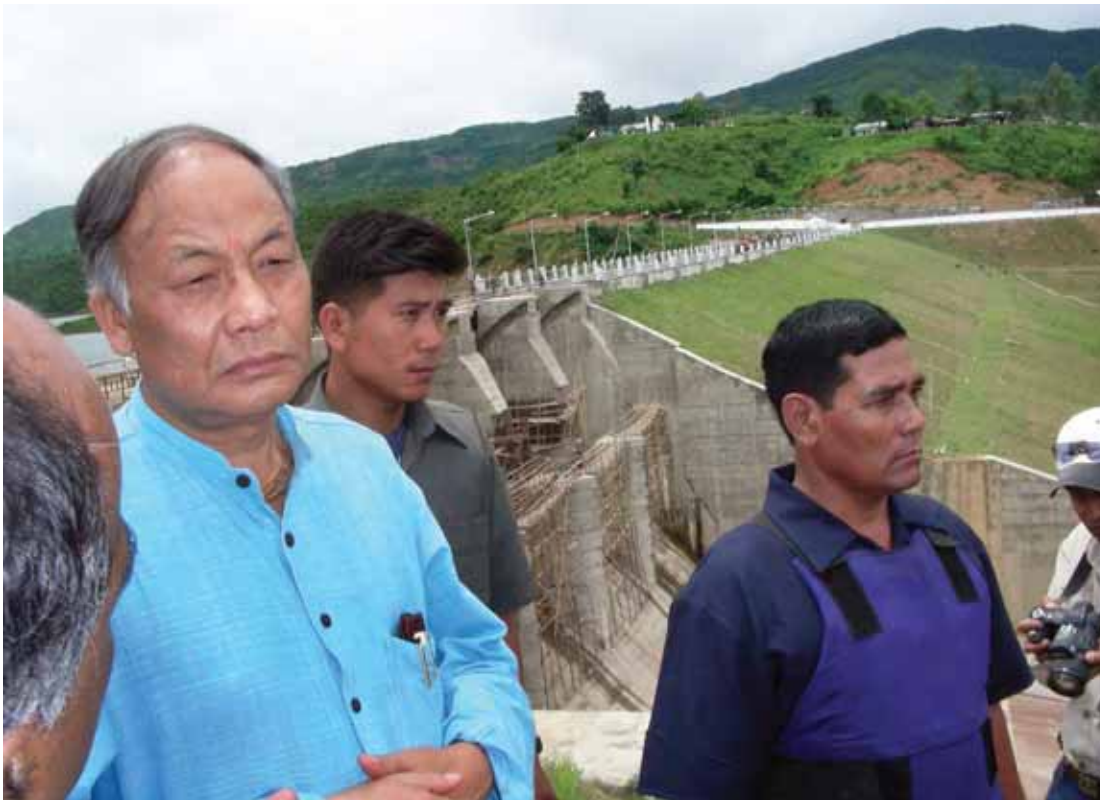


Shri Zoramthanga, Chief Minister of Mizoram inaugurating a power station in Aizawl





Shri Dorjee Khandu, Chief Minister Arunachal Pradesh, inaugurating mini hydel project at Kurung Kumey District



Shri O. Ibobi Singh, Chief Minister of Manipur inspecting a dam site



by only 132KV lines. PGCIL activities are at present restricted to inter-state transmission systems only. The states in the region have expressed concern at the levying of high wheeling charges @ 35 paise per unit by PGCIL. Sub-transmission and distribution have been taken-up mainly in the state sector with financial assistance from Ministry of DONER and NEC. The Ministry of Power provides assistance to the states for improving distribution systems under the Accelerated Power Development and Reforms Programme (APDRP). There is an overwhelming demand for the continuation of the APDRP during the Eleventh Plan under existing guidelines and norms.

Very high transmission and distribution losses occur in the region ranging between 28.35 per cent (Meghalaya) to 70.61 per cent (Manipur) as is indicated by figures of (2004 - 05) and is an area of concern. Of the total 40,377 inhabited villages (2001- census), 25,248 (62 per cent) had been electrified by October 2006.

A two-pronged strategy needs to be adopted for power generation with focus on small/localized hydel and Thermal and NRE projects for catering to local needs. There is also a need to install high capacity hydel and thermal power projects with associated transmission lines for first meeting the demand for power of NER and thereafter that of the rest of the country. A clear and coherent policy is required to be evolved for NER which takes into account the special characteristics and needs of the region, so that the benefits of power availability reach the people of the region. The second priority with respect to the development of the power sector in NER is to ensure that the growing and diversified demands for power for the economic development of NER are met in full. The third priority should be the export of power from the region to elsewhere in the country so that NER does in fact become the “power house” of the country. ONGC and ILFS are in the process of setting up the 750 MW Palatana Gas Power Project in Tripura. Only Tripura and Assam have entered into a MoU with ONGC/ILFS for purchase of power. Other power deficient states should also approach ONGC/ILFS for accessing power from the Palatana project. PGCIL must invest more in trunk transmission lines for improving inter- and intra-region connectivity. Adequate transmission systems should be in place for evacuating power generated by public and private sector hydro projects in Sikkim to be developed. Priority has to be accorded for creating a grid to meet power shortages in the North Eastern States. Improvement, transmission, sub-transmission and distribution systems is to be one of the thrust areas for NEC during the Eleventh plan In order to build up a shelf of priority projects, NEC is expected to support intensive survey and investigation work relating to such projects by State Governments. The issue of gas availability and pricing is a matter of concern and needs to be appropriately addressed for exploiting the substantial gas reserves in the region for power generation.

To achieve these objectives, top priority attention needs be paid to the Small Hydro Power Programme (SHP) for NER, to be supplemented by other sources of new and renewable energy such as biomass and solar energy. It is evident that the existing structure of SHP is proving inadequate for accelerated implementation in NER, as evidenced, for instance, by the fact that out of 492 projects identified in Arunachal Pradesh, the NER state with the highest SHP potential, only 64 have been implemented, 48 are under construction, and thus as many as 380 out of 492 projects are still far from being implementable. At the same time, it is evident that households around the North East, public thoroughfares including highways and trunk roads and other public places need to be lit up at night both for the people’s comfort and as a security measure. Yet,





although 62 per cent of the villages are electrified, only 24 per cent of the households receive electricity. Therefore, the following inter-related policy measures appear to be required: a) Restructuring SHP for NER so that the level of subsidies ensures accelerated implementation of all identified SHP projects in NER which have been designed to generate over 2000 MW without complicated problems of transmission and distribution. Prioritizing NEC/ NLCPR lending to furnish viability gap funding for SHP projects. Ensuring sustainability of SHP projects through the involvement of elected representatives of the local community through Panchayati Raj Institutions/ Village Development Councils/ traditional bodies, as the case may be, in the management, repair and maintenance of SHP projects. It would appear that similar measures are required to popularize other MNRES programmes such as those relating to biomass and solar energy. With a view to ensuring the utilization of the power generated in NER for accelerated industrial and economic development of the region itself, the following critical areas of attention have been identified:

- a) Prioritizing inter-state transmission within the region in the funding patterns of both the NLCPR administered by the Ministry of DONER and the funds allocated to NEC.
- b) Concerted attention by states, DONER and NEC to funding sub-transmission systems so that NER power is amply available for consumption within NER in all sections of the population and for all economic activities.
- c) Similarly, for distribution, besides prioritization in funding by states, DONER and NEC, the Union Government's Accelerated Power Development and Reforms Programme (APDRP) also needs to be oriented towards implementation in NER.
- d) Consideration by the Union Government of a centrally sponsored scheme to support inter-state and intra-state transmission and sub-transmission projects.
- e) In view of the immense losses in transmission and distribution in NER, which are well above the national average, compounded by theft and other criminal activity which reduces availability to the consumers, special attention is required to be paid to managing the T&D system so that, through this most economical route, power availability to the consumer is expanded exponentially.
- f) To convert NER into the 'power house' of the country, the critical requirement is to immediately do all that is required to ensure evacuation through the narrow window available in the Siliguri corridor ('Chickens Neck').
- g) Against an expected capacity addition of about 30,000 MW in the Tenth Plan, only about 225 MW is expected to come in the North East. Upto now, only about 125 MW has been added (i.e, 25 MW hydro (Kopili) and the rest thermal). Another hydroelectric project (Karbi Langpi, Assam) of capacity of 100 MW is expected in the next couple of months. A massive stepping up of public sector investment in power in the North East in the Eleventh Plan is envisaged. But it is imperative that the Union Government, in consultation with the State Governments of Arunachal Pradesh and Assam, sort out outstanding issues relating to the 2,000 MW Lower Subansiri project immediately.
- h) All development projects in NER, but most particularly projects in the power sector,



require massive infrastructure backing, especially roads to transport heavy equipment and helicopters to transport smaller sized equipment, particularly for SHP. In the prioritization of roads and highway development in NER, and in the deployment of helicopters, power sector requirements need further prioritization.

- i) While, on an annual basis, NER has been a net exporter of power for the past several years, the fact that much of this exportable surplus comes from hydel sources means that there are times of the year in the lean season when NER needs to import power from the Eastern Grid. Therefore, in recognition of the contribution which NER is making to the Eastern Grid, particularly from Sikkim, reciprocal arrangements need to be put in place for the Eastern Grid to feed NER as and when required.
- j) While NER would be the primary source of hydel power for NER itself and the country as a whole, due recognition needs to be accorded to the availability of thermal sources of energy, including coal, shale and natural gas, in NER, the exploitation of all of which falls at present far below the potential. A coherent policy of exploiting the thermal energy sources of the North East needs to be put in place through coordination between the ministries concerned in the Union Government and the State Governments.
- h) There can be little doubt that the future of the North-East rests upon its coming into its own through the power sector. It also needs to be recognized that NER can make an invaluable contribution indefinitely to the country's energy security through clean hydel energy. But this immense potential for the development of NER and the country cannot be realized until and unless special treatment is meted out to NER in the short term in the expectation and confidence that NER would reach the take-off stage in the medium term and NER would then become the front-rank region for the development of the country as a whole in the long term. An enlightened, overall and long-term vision, therefore, needs to inform a clear, coherent and consistent power policy for the North East.

### 7.3 Telecommunications and Information Technology

Telecommunication plays a vital role in connecting people with the rest of the world and improving their economic well-being as does physical communication. Since physical infrastructure in NER is either limited or is expensive, telecommunication becomes an even more important mode of communication. The teledensity of the North East is low in comparison to the rest of India as shown in Table 7.14 and only Mizoram has a teledensity higher than the national average (Table 7.18A in Annexure 7.1). Further, the rate of increase in teledensity in the region is slower than the national average, which could be due to the limited expansion of exchange capacity (Table 7.19 in Annexure 7.1).

Cellular mobile services were introduced in the region only in 2003 after a delay of eight years than the rest of the country on security considerations. There are still some restrictions in border areas and no signals are allowed within 500 metres of the international border. This restriction is particularly harsh to the North East states where a significant population lives in border areas and, therefore, should be removed as early as possible.

To address the situation, BSNL declared the year 2007 as the “Year of Development of Telecom Network in NE Region”. The budgetary allocation of BSNL for 2007-08 was increased to more than 1.5 times of the total expenditure made during the previous three years in the region. This is expected to add 1.30 lakh fixed line connections and 11.19 lakh cellular connections as against the existing total of 2.55 lakh fixed line and 11.24 cellular connections. Similarly, there would be an addition of 1.35 lakh broadband connections as against a total of about 19,000 connections at present. A total of 89 new towns will be brought on the broadband map as against a mere 20 towns/cities at present. Even though the initiatives of BSNL, as well as of private service providers, are expected to improve the situation considerably, a lot will have to be done further.

**Table 7.14: Mobile Phone Users in the North East as on March 31 of the Year**

State	2002		2003		2006	
	No.	Per Lakh Population	No.	Per Lakh Population	No.	Per Lakh Population
Assam	28,811	105.8	48,331	181.01	10,81,136	3,861.88
North East*	4,512	35.48	8,692	66.21	4,69,660	3,255.88
<b>India</b>	<b>64,31,520</b>	<b>612.03</b>	<b>1,26,88,638</b>	<b>1,181.95</b>	<b>9,25,18,319</b>	<b>8,085.88</b>

Source: *indiastat.com*.

The most important infrastructure required for the development of telecommunication including mobile technology is optical fibre networking and broadbanding. It would be difficult to get the services of a dedicated communication satellite for the region and therefore, erection of towers and spreading optical fibres presents the viable option for the region. Alternatives like utilizing the power transmission and distribution network etc. should be explored for optimizing costs.

The telecommunication revolution in the country has led to a dramatic increase in Internet connectivity in the country, which has made possible the revolution in Information technology. That Internet usage is low in the North East is clear from the insignificant number of connections in NER, being a low 15,303 in 2002, just 0.48 per cent of the total number in the country. This increased in 2003 but was still less than 1 per cent (0.88 per cent) of the total (Table 7.20A in Annexure 7.1). It is thus reasonable to conclude that the NER states have not been impacted by the telecommunication revolution as much as the rest of the country. The low Internet penetration is particularly worrying given the long-term plan of rapidly increasing the spread of IT services in the region.

While telecommunication technology is essential for the spread of information technology in the region, the development of the latter is an essential prerequisite for the development of the region. Information technology cuts across all sectors and technological upgradation and development of every sector depends on the progress made in its spread in the region. This would require significant strengthening of the infrastructure for the development of the IT and ITES sectors in the region.

As mentioned earlier, a good information technology base is essential for the development of every sector in the economy. Information technology is necessary for the management of information required for grassroots planning. The compilation and collation of data on physical, human and financial resources right from the village level, preparing the plans, their implementation, monitoring and evaluation in a systematic manner requires the application of the technology. The most important application of the technology is in governance; e-governance is particularly important to ensure that the large public investments produce expected outcomes. A pro-active and responsive administration will be greatly facilitated by e-governance. The technology helps to bring the markets closer; e-choupals can provide information on prices and input supplies from the markets far and near. This also plays an important role in the agro-processing industry and in the development of handlooms and handicrafts by accessing the latest designs and marketing of the products. In this regard, the initiative of the Central Government in setting up of Community Information Centres (CIC), which are being upgraded to Community Service Centres (CSC), are playing an important role and should, therefore, be strengthened.

Technology helps in both education and healthcare. The spread of information technology education could help the region to become an important hub for IT and ITES industries. It will also provide productive employment opportunities to the youth which can trigger the development process in the region. In the healthcare sector, information technology has an important place in the development of e-medicine. Considering the importance of IT infrastructure for the development of virtually every sector in the economy of NER, this should be of utmost priority. Given its complementarity with the power and telecommunication sectors, the plan for the development of the sector should be calibrated in a coordinated manner.

## 7.4 Recommendations of Earlier Commissions

Ever since the mid-1990s, every study of the NER states has talked of the need to promote infrastructure development.

**7.4.1 *The Shukla Commission Report (1998):*** Transforming the North East - Highlevel Commission Report, Planning Commission, and Government of India. Main recommendations on infrastructure;

### 7.4.1.1 Roads

In the interest of improved trunk connectivity, four priority roads recommended by the 1994 working group should be developed as National Highways. These are:

- The 290 km. Daboka-Lanka-Lumding-Haflong-Udarband-Silchar highway in Assam;
- The 241 km. Kohima-Mokokchung-Amguri road providing an alternative connection between Assam and Nagaland,
- The 210 km. Sairang-Manu highway linking Aizawl to Agartala, and
- The 135 km. Agartala-Udaipur-Sabroom highway in Tripura which is already included for upgradation in the PM's package.



Their construction should be given to the Directorate General of Border Roads (DGBR). Maintenance of NH 52 section between Balipara to Jonai should be entrusted to DGBR.

Following roads should also be given high priority in the Ninth Plan proposals for upgradation of roads in the state sector:

- North Guwahati Hajo-Barpeta-North Salmara, Assam (120 km.). This will provide an alternative link to North Salmara where it will join NH 31. The existing section of NH 31 between these two points is highly vulnerable to floods and is also affected by militant activities.
- Dudhnoi-Damra-Nangalbibra-Bagmara-Gasuapara-Dalu, Meghalaya (196 km.). This road will connect NH 38 and NH 51. It passes through limestone and coal deposits and is the route for exports of coal to Bangladesh.
- Aizawl-Thenzawl-Lunglei-Tlabung (Demagiri), Mizoram (263 km.). Shell limestone deposits in the area between Tuirial airfield and Sailungvar Tlang will be accessed with the construction of this road. It will also provide a connection to the Karuphuli waterway through Bangladesh to Chittagong in due course.

The other state highways, major district roads and other district roads proposed, including the Arunachal East-West Highway, should be integrated into a regional master plan for roads.

In addition, there is need for a revised regional perspective plan for road development in the North East with international linkages. This should be related to and prioritized according to emerging opportunities and strategic requirements and could incorporate the NEC's proposal for a road all along the Indo-Myanmar border from Champhai in Mizoram to Vijoyagar in Tirap, Arunachal Pradesh.

As in the case of railways, Bangladesh should be approached with proposals for a road connection from Agartala to Akhaura and for the construction of a major new highway from Lunglei-Tlabung (Demagiri) in Mizoram to Chittagong. This would open up both central and western Mizoram and the Chittagong Hill Tracts for development and tourism. The Tlabung (Demagiri) connection will also provide access to the Karnaphuli waterway.

DGBR could be tasked to take on a larger role in road development and maintenance.

The Rubber Board has constructed a short stretch of rubberised road in Tripura as this surfacing is better able to withstand wear and tear and heavy rain. This pilot project should be critically evaluated under varied conditions as the technology could have a bearing on maintenance costs which are very high in the region.

#### *7.4.1.2 Railways*

- Full funding for expeditious completion of the present clutch of sanctioned projects already under way, including the Bogibeel Bridge.
- The Diphu-Karong and Bairabi-Saireng lines should be taken up in the interests of national integration. The Commission accordingly suggested a suitable provision that will enable





work to commence during the Ninth Plan on these two lines and the Siliguri-New Bongaigaon conversion.

- The construction capability of the railways may be augmented commensurately.
- The operating losses on the new lines proposed should be a charge on the general budget.
- There should be a fast and conveniently timed overnight train between Dimapur and Guwahati to enable passengers to connect with air services to and from Delhi and Kolkata.
- Early discussions should be initiated with Bangladesh for linking up the IR and BDR railway systems, particularly in the Karimganj and Agartala sectors. India should be prepared to invest on such upgradation as the BDR system might require in order to carry additional Indian traffic up to Chittagong. This also includes augmentation of related port capacity. These options could offer quicker and more cost-effective solutions to some of the problems of the North East.

India should offer to assist Myanmar which would like to extend its railway along the Chindwin valley, parallel to the Mizoram-Manipur border. This would link with the main Yangon-Mandalay rail system and could form part of the Trans-Asian Railway in which international interest has been revived. The Government of India was in fact earlier indirectly approached to provide coaching stock up to a value of 8-9 million dollars.

#### *7.4.1.3 Waterways*

- Give priority to East-West ferry crossings on the Brahmaputra, not North-South journeys because this is of better road and rail connectivity for the latter.
- Heavy goods and containers to be transported by IWT instead of roads because this is cheaper, more fuel-efficient and safe; on the other hand, highways and vehicles are damaged by slow movement of heavy goods carriers as well as high energy expenses.
- Promote heritage tourism along the river through heritage bungalows (tea estates), improved and safer country boats as well as luxury ships such as the Charaideo, launched in 2004 by a private Guwahati company in partnership with a British group (the tours are booked out for years).
- Improve connectivity between roads and ghats (river ports) (Planning Commission, Assam Development Report, 2002).
- Better flood management and deepening of channels on the Brahmaputra through more travel of vessels and regular dredging.
- High priority should be accorded to IWT in the North East and enhanced transit and transshipment arrangements negotiated with Bangladesh along the lines indicated.
- The charter and competence of IWAI be enlarged with adequate financial support and a meaningful presence in Guwahati and Silchar.
- Close liaison is necessary between the Central Water Commission and the Brahmaputra Board on the one hand and IWAI on the other so that water resource development meshes with the development of waterways.



- The Central Inland Water Corporation (CIWTC) must be strengthened with a strong regional presence. At the same time, private operators should be encouraged to take up component segments of IWT development and operation. Funding should be provided.
- Modernized country craft development should be taken in hand to extend services to feeder routes. There should be some agency to study this matter and play a promotional role.
- There has to be a policy for waterfront development and location of industries to generate traffic. Short navigation canals from such waterfronts or waterways to deepened beels with jetties and production/warehousing facilities around them might be envisaged. Ring embankments could offer flood protection.
- An R&D facility needs to be developed to undertake studies with regard to types of river craft for different categories of waterways and cargo in the North East sector. Safety should be an important factor.

#### *7.4.1.4 Aviation*

- Guwahati should be made a regional hub for Indian Airlines so that aircraft stationed there can operate services without delays on account of late arrival of aircraft from Kolkata or Delhi because of fog or other weather or technical problems.
- With the gradual lifting of the restricted area permit regime in the North East, and the opening of new trade and tourist opportunities, international flights should operate out of



the region to destinations like Dhaka, Chittagong, Mandalay, Yangon and Bangkok in the first instance. Tourist packages could be developed around these services.

- An integrated plan for the utilization of the Guwahati international air cargo facility should be prepared by the Ministry of Commerce in consultation with the North-eastern states.
- A study should be initiated for inducing short take-off-and-landing (STOL) aircraft into the North East circuit in view of the need to connect remote hill areas and provide feeder tourist services.

#### *7.4.1.5 Power*

- Full funding must be provided to ongoing power projects to ensure that further cost and time overruns are avoided in this critical sector.
- The Department of Power should take concerted action to refine its prospective power development programme for the North East, currently under preparation, in consultation with the Brahmaputra Board, NEEPCO, Power Grid Corporation and the concerned states, taking account of all pending and proposed hydel, thermal and gas-based stations on the anvil. These projects should be ranked and efforts made to secure funding.
- System efficiency must be improved by urgent steps to reduce T&D losses and improve PLF. CEA or Power Grid Corporation should undertake a quick study of critical gaps and linkages within three months with priority funding.
- A similar expert assessment should be made of the additional generation that can be brought on stream by meeting fuel deficits, whether of gas or coal.
- Determination of who should execute the Karbi Langpi, Kameng and Loktak downstream projects should be speedily resolved to avoid delay and further cost escalation.
- The proposed power tariff regulatory authority should be brought into being as early as possible, or this might even be done separately for the North East as an interim arrangement, as a prelude to the reorganization of the Assam and Meghalaya electricity boards. Consumers would prefer reliable supplies and service to notional subsidies that do not really benefit them.
- Consideration should be given to corporatizing the remaining five electricity departments in the North East so that they are insulated from political pressure and patronage in pricing, staffing and forward planning. There has to be a new culture if the huge power potential of the region is to be realized.
- SEBs be allowed to borrow for expansion purposes. We accordingly recommend that the centre guarantee these borrowings on suitable terms and conditions related to North East realities and opportunities.
- The Brahmaputra Board, and all other water resource and development agencies in the North East, must be mandated to the fullest transparency so that public confidence and accountability are enhanced. Early public hearings and consultation with NGO groups could prove to be rewarding. Delays in implementing mega projects would be disastrous and it is imperative that compensatory action to mitigate all environmental impacts and ensuring protection of biodiversity are assured.

- An early inter-state meeting should be convened by the centre at the highest level to secure full agreement on and approval for the Tipaimukh project which could have a transforming effect on the southern tier of the North East.
- Investigations of the twin Chhimtui (Kaladan) hydro projects in southern Mizoram should be conducted with an eye to investigating the possibility of navigation down the river to Sittwe (Akyab) and the sea. The cooperation of Myanmar authorities should be sought. The Kaladan is reportedly already navigable for a considerable stretch in Myanmar up to Paletwa.
- Initial planning should be taken in hand to tie the North Eastern and Eastern electricity grids in view of the expected growth of generation in the North East and Bhutan. The currently prevailing situation when surpluses in the Eastern Grid cannot be transferred to the adjacent power- short Northern and Southern Grids should be avoided.

Even in the intermediate period, power generation could become the cash-strapped North East's largest source of resource mobilisation.

## 7.5 The Way Ahead for Infrastructure

No vision for NER is implementable without major improvements in infrastructure. Thus, any attempt to pose NER as an integrated economic entity will be meaningless till inter- and intra-state connectivity is ensured, particularly via road and rail links. Even more important, the development of infrastructure in the North East must now be viewed from the standpoint of the region as a whole, rather than as a component of the five-year plans of any state. As recommended by earlier studies, an integrated transport network for NER as a whole must be drawn up keeping in mind the long-term trade and production plans for the region.

Earlier sections in this report have noted the absence of a private sector (with the exception of Sikkim), in the hill states in particular. With insurgency now abating in the hill areas, a vision for NER will involve the private sector, but this will require the state to play a leading role. Hence, for example, while the PPP mode may work well in power and telecommunication, it is unlikely to take off in road infrastructure: the low levels of existing traffic in the region would not justify PPP models. Hence, NER will have to be granted exceptions from the use of PPP in state highway projects.<sup>16</sup>

The development of infrastructure will need to be done mainly by the Central Government rather than by State Governments. Developments in the power sector already bear this out. In the case of roads, the nature of the terrain in the hill areas makes infrastructure development particularly expensive. Here, too, the centre must play a leading role as maintenance expenditure would swallow up the small budgets of the hill states, especially as the road network expands. There is some evidence that state roads are already falling into disrepair.

Finally, telecommunication infrastructure in NER lags far behind the rest of the country. This infrastructure is particularly important given the difficulty of physical communication in the hill areas. Apart from allowing greater national and international integration for the people of the region, most of the earlier studies have pointed to the need for NER states (particularly in the hilly

<sup>16</sup> Similar concerns were expressed in the Sixth Sectoral Summit of NEC





areas) to promote their IT sectors. As the IT industry moves from the metros of the country to outlying areas, NER states are considered the next most likely destination, given the high rates of literacy, a large pool of educated people, and dust-free environments of the states in the region.

To conclude, any vision for infrastructure development in NER must factor in not only the need for creating a unified economic zone in NER over the next ten to fifteen years but also the need to ensure connectivity from the point of view of national security.

## 7.6 Recommendations for Infrastructure

- Much of the infrastructure spending in NER would have to be done by the Central Government; PPP models such as Build-Operate-Transfer (BOT) being implemented in other states are unlikely to succeed particularly in road and rail networks.
- Power is the single most important constraint to the economic growth of the NER states. In the long run, the planned development of Arunachal as the 'hydel capital' of the NE makes sense. However, environmental and other concerns need to be sorted out before appraisal, not after DPRs are in place.
- In the short run, say five years, targeted generation should be lowered to 5,000 MW (double the present capacity of the NE) to eliminate power constraints to the economic development of NER. In addition, internal transmission grids are the biggest priority in all the states.
- In the immediate future, the hill areas could substantially meet consumer demands in far-flung areas via micro-hydel projects. The Ministry of Non-Conventional Energy Sources (MNES) could be approached for appropriate subsidies.
- In planning road networks under SARDP particular attention should be given to roads within states as these are crucial to both creating a unified NER market and improving tourist activity.
- However, the funding pattern and source of funds must be specified upfront or the planned network will remain a pipe dream. Logically, the planned extensions of existing lines to states by 2010 should be tackled first, and connectivity of state capitals dealt with in the subsequent five years.
- Air connectivity in NER remains an issue, due to the inability to determine the hub which has remained Kolkata by default. Guwahati is the natural hub but it should be possible to link state capitals directly to each other through the use of air taxis.
- In the long run, NER can benefit greatly from the IT revolution, if telecommunication infrastructure is developed along the lines followed by the rest of the country. However, since hilly terrains are not very conducive to normal broadband connectivity, the use of optic fibre to enhance connectivity seems to be indicated.
- Much more attention should be given to inland water routes as a method of connectivity within the region. The existing potential is largely untapped.



Chapter 8

# HUMAN DEVELOPMENT





## Chapter 8

# Human Development

An important measure of human development is the extent to which people's capabilities are enhanced to participate meaningfully in political and economic activities<sup>1</sup>. Increases in capabilities increase freedoms over their life choices. People's capabilities are built and enhanced by expanding opportunities to access knowledge and improve their skills, and by providing them with a healthy environment in which to exercise their livelihood choices. In this context it becomes vital to build people's capacities if they are to contribute to, participate in and benefit from the region's development. This chapter looks at some of the main components of human development - access to education, health and basic necessities in the region - highlighting the constraints in the provision of regionally balanced and universal access to these services in the North East. While state governments need to take an active part in resolving many of these issues, people-based participation in the development process will mean greater involvement of local organizations such as Panchayats and Village Councils, in the delivery of these services at the grassroots level.

### 8.1 Education

Education provides the underpinning to any vision of NER. One of the most basic components of human development, it impacts on the welfare of almost everyone in the region; in fact, the lack of quality education limits the growth process. Further, a focus on children, women and youth is vital in this region with its substantial 'young' population. Recent population growth in many of the NER states has meant that a large proportion of the population is less than 14 years, accounting for as much as 40 and 42 percent of the state population in Arunachal Pradesh and Meghalaya, respectively. In its broadest sense, education will be the critical input for equipping these young people to expand their life choices.

Clearly, in any people-centric vision of NER, education and the building of skills and knowledge will be the cornerstone. This is the only capital that people without land and financial capital can acquire to enhance their income streams and improve their living conditions. In the development process, education is vital to growth across all sectors. The past decade has seen visible improvement in overall educational attainment of several of the north-eastern states: male and female literacy rates have increased (Table 8.1A in Annexure 8.1), and so have school enrolments (Table 8.2A in Annexure 8.1) and school infrastructure. Recruitment of teachers has kept pace with the expansion in school infrastructure, as indicated by the very favourable average pupil-teacher ratios across NER states, which is far lower than the national average (see Table 8.10A in Annexure 8.1). Progress is also being made in increasing enrolment and retention in elementary schools through the Sarva Shiksha Abhiyan (SSA - Education for All) that has been introduced in phases among the North Eastern states since 2001-02.

Despite the expansion of educational infrastructure and impressive literacy rates and pupil-teacher ratios in the region, the standard of education in NER is generally low, and the skills and knowledge base of school and college graduates has not equipped them to compete at the national level for further studies or employment, or engage effectively in entrepreneurial activity (see Tables 8.9A(a) and 8.9A(b) on school performance in Annexure 8.1). The vision for the region thus calls

<sup>1</sup> The capabilities approach to development was enunciated by Amartya Sen (in *Development as Freedom*).



for a vast improvement in the quality of education, infrastructure and facilities at all levels, so that children and youth have access to good quality education that will place them on par with the best in the rest of the country.

### 8.1.1 Schooling: Towards Universal Education

While school enrolments have been increasing, they are still low in some states: enrolment in all grades in Nagaland, for example, is far lower than the national average (at 18.1 percent in grades IX to XII against the national average of 38.9 percent) (Table 8.2A in Annexure 8.1). The success in increasing school enrolment is dampened by dropout rates, which are higher across NER than the national average (apart from Manipur), and have actually increased in Meghalaya and Mizoram since 1992-93 (Table 8.4A in Annexure 8.1). Even in Mizoram with almost 90 percent literacy, only one-fourth of the children originally enrolled complete high school.

Some of the main reasons cited for non-attendance (Tables 8.5A(a) and 8.5A(b) in Annexure 8.1) include economic deprivation (an important reason why males in particular do not attend an educational institution), the burden of household work (for females across the region), and distance from school (especially for rural children in Arunachal). *Jhum* cultivation, still prevalent in the region, involves all the able-bodied workers in the family, and could be a major reason for non-enrolment in rural areas, especially Meghalaya, Mizoram, Nagaland and Tripura where ‘working to supplement household income’ was cited as being more important in the rural areas. Thus, the tribal population in the region has very little access to education. Improving access to good education to these groups holds the key to improving their livelihood systems and finding a lasting solution to the problem of insurgency in the region.

Unfortunately the ‘other’ reasons for non-attendance listed in the NSS survey have not been specified; this would be an invaluable policy input, as it accounts for the vast majority of non-enrolment in Nagaland and Sikkim. Studies in other regions have shown that the absence of drinking water and toilet facilities deters students (especially girls) from coming to school.

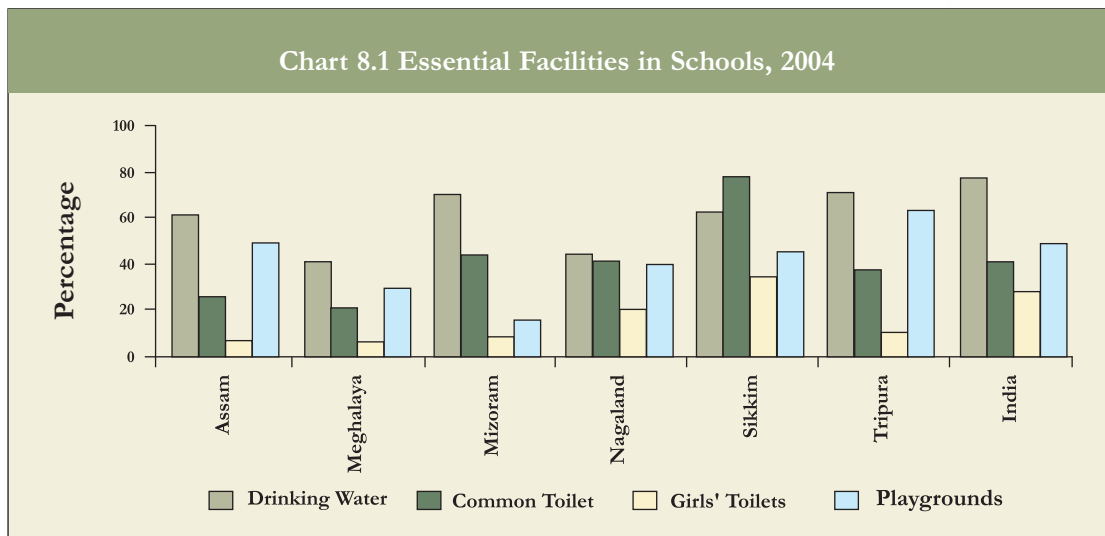
#### 8.1.1.1 Schooling for All: Reaching-out to All Children

**Accessibility:** Access to schools is still a problem especially in remote areas with scattered habitations such as Arunachal, where almost a half (48 percent) of rural habitations do not have a primary school within one kilometre, and only 31.2 percent have upper-primary school facilities within three kilometres (Table 8.6A in Annexure 8.1). Special attention needs to be given to school enrolment in the areas under the Sixth Schedule, where Autonomous District Councils establish, construct and manage primary schools. High dropouts in the higher grades (Table 8.4A in Annexure 8.1) means that special attention needs to be given to schooling in the early years.

**Secondary school expansion:** By 2010, the demand for secondary education is expected to explode across the country, buttressed by the successful efforts of the Sarva Shiksha Abhiyan (SSA) in promoting universal elementary education. The targeted gross enrolment ratio by the end of the Eleventh Plan is 85 percent for classes IX-X, a massive thrust, which will require careful planning. In the very short term this will call for an assessment of educational needs, physical infrastructure, human resources, academic inputs and effective monitoring.

### 8.1.1.2 School facilities

Learning takes place best in well-lit and well-maintained schoolrooms, in schools where children can visit a clean toilet, drink clean water and have good play facilities, many of which are lacking in the schools in the region (Chart 8.1, Table 8.7A in Annexure 8.1).



Source ; NIEPA (2005), pp 189-206

**Libraries, Computers and Laboratories:** There is tremendous disparity in school facilities in NER, across regions and districts, between private and public schools and rural and urban schools (Chart 8.2, Table 8.8A in Annexure 8.1).<sup>2</sup> The neglect of science teaching in these states is evident from the poor laboratory facilities; as these figures are an aggregation of rural and urban data, and facilities are far worse in the rural areas.

Apart from Sikkim at the secondary level, less than 10 percent of the schools in the region have enough computers for their students, even those pursuing computer studies. Computer literacy is a vital component of education in the 21<sup>st</sup> century, and there is no faster way for students of the North East to become part of changing trends globally and nationally than through the universalization of computer education and training. Early exposure to computers, including at the school level, is a vital foundation for further studies and employment, not just directly in IT but for almost any course of future study and work.

### 8.1.1.3 The Quality of Education

Among the various factors contributing to poor school performance, the broad consensus is that 'teacher quality' is the single most important variable influencing student achievement. In almost all the North Eastern states, only a small proportion of teachers – far below the national average - across all grades are trained (Chart 8.3 and Table 8.10A(a) in Annexure 8.1).

High average pupil-teacher ratios hide a skewed distribution of teachers in most states, with more favourable ratios in the urban or developed areas. Tripura, for example, has an acute deficiency of teachers in its remote villages and forest areas.<sup>3</sup> The scattered nature of habitations in

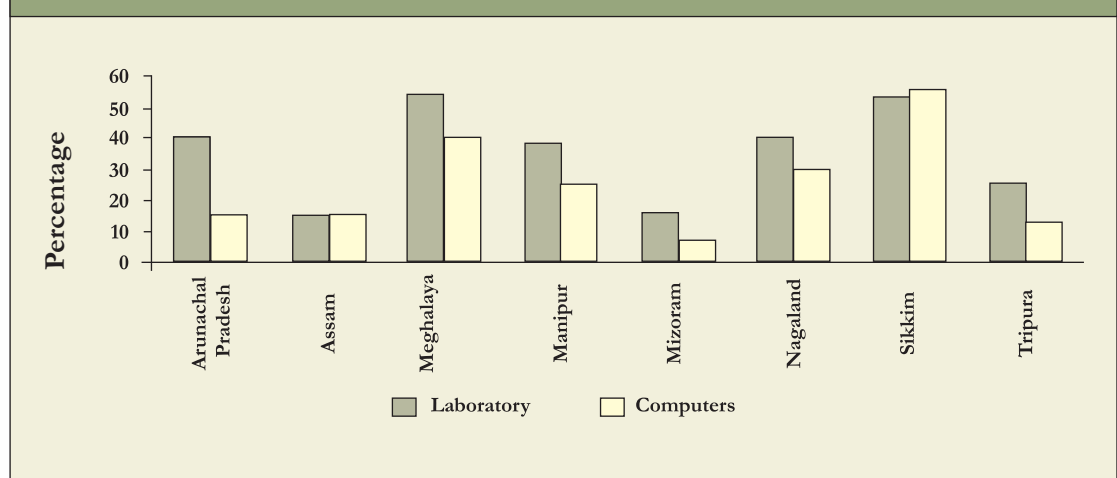
<sup>2</sup>In the rural high school the study team visited outside Aizawl, students prepared for their courses in computer studies without ever using a computer, and studied chemistry and physics with no exposure to a laboratory; neither was there a functioning library.

<sup>3</sup>Tripura Human Development Report. Mizoram and Assam also have regional imbalances in the distribution of elementary school teachers, with PTRs as high as 80:1 reportedly in some schools in Assam.





Chart 8.2: Higher Secondary School with Laboratory and Computer Facilities, 2004



Source: Seventh Educational Survey

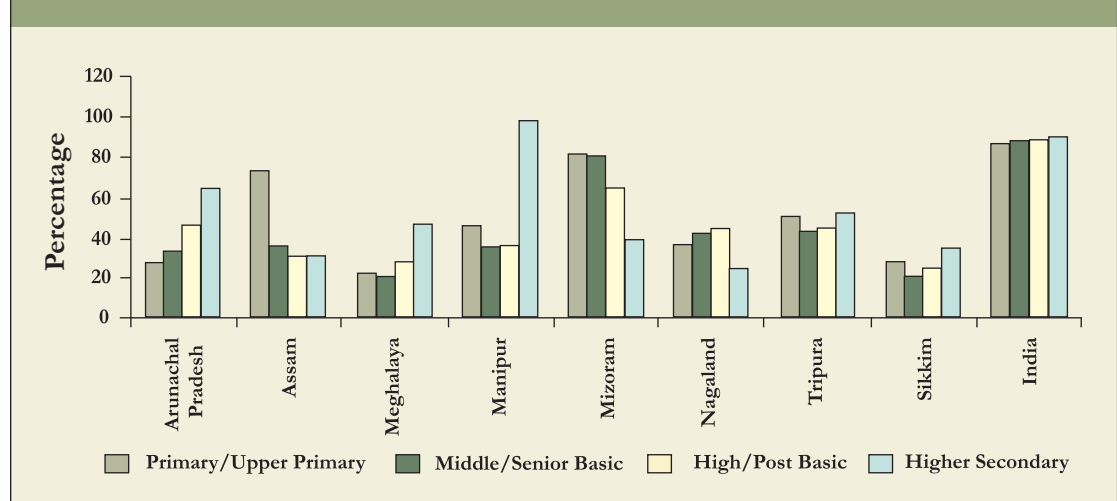
parts of the hill states and resultant small school-going population mean that a high proportion of primary schools in NER function with only one teacher.

The quality of education is also affected by reportedly large-scale absenteeism among teachers in government schools<sup>4</sup> and the practice of ‘proxy’ teaching. Often these substitute teachers do not have the requisite qualifications, so school children are short-changed by the poor quality of instruction and knowledge.

### 8.1.2 The Way Forward: Recommendations for School Education

The fundamental importance of education to any vision for NER will mean that across the region schools, facilities, teaching and curricula will need to be geared up handle the challenges

Chart 8.3 : Proportion of Trained Teachers



Source: Selected Educational Statistics 2003-04

<sup>4</sup>A World Bank project to measure the extent of absenteeism in primary schools in India found in general 25 per cent of Government teachers were absent, and of those present only 45 per cent were actually teaching on the day evaluators paid an unannounced visit. Assam, the only North Eastern state covered by the survey, has teacher absenteeism rates as high as 33.8 per cent, against the weighted average of 24.8 per cent for all the states (Kremer et al, 2005).

of the coming years. The vision for the region would require a shift from measuring quantitative outputs to monitoring qualitative outcomes so that efforts to increase enrolment are strongly supported by efforts to improve learning levels and performance.

### *8.1.2.1 Quality Teaching*

One of the most important tasks of a short-term strategy would be to substantially improve the quality of teacher inputs in schools. The emphasis will shift from hiring teachers to ensuring that children receive an education from a well-qualified, dedicated teaching force trained in the most recent teaching methods, in sync with the specific needs of the region, using up-to-date relevant material and curricula.

### *8.1.2.2 Improving Access to Tribal and Disadvantaged Groups*

Ensuring greater access to various tribal groups is extremely important. Locating the schools at convenient points, creating crèche facilities to enable the children, particularly female children to attend schools and constructing hostels for tribal students from remote areas to access quality education in towns.

**Recruitment and Deployment:** A body to regulate appointments could ensure that recruitment is a transparent process, based on qualifications and experience. Better incentives, facilities and even security in some situations could motivate teachers to shift to villages. The absence of provisions for renting accommodation in some remote pockets makes it imperative that adequately equipped teachers' quarters are constructed in these areas. Village Panchayats and other village-based bodies can help in the recruitment of teachers in areas which face difficulties in hiring teachers,<sup>5</sup> but recruitment has to be based on a proper assessment of their qualifications and potential for training.

**Training:** The enormous backlog of untrained teachers at all levels in the region can only be effectively tackled through the distance mode of teaching. NCERT is developing a comprehensive module for this, and states are identifying good teachers to be trained by experts as master trainers for the rest of the teaching force. While initial training is proposed to be carried out at institutions, there is a strong case for training large numbers of teachers through distance-learning courses developed by IGNOU and other professionals in the field. Training needs will have to be assessed routinely to make sure teachers get the training they need.

**Focus on good science and mathematics teaching:** In the short run, there could be a drive to recruit good maths and science teachers at all levels from outside the region, as these subjects need a solid foundation in the lower grades. In the medium term, good in-service training materials need to be developed perhaps with inputs from science faculties from universities in NER, to address the issue of improved teaching in these fields.<sup>6</sup>

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<sup>5</sup> This was also one of the recommendations at the Sectoral Summit on Education on August 20, 2007.

<sup>6</sup> The recently instituted North Eastern Regional Educational Council (NEREC) will give priority to the quality of science and mathematics, which will include orientation training to primary school teachers. It is helping translate science and maths books into local languages. To promote IT education, it will collaborate with ERNET India to set-up high-speed links in ten universities to promote access to Internet, e-journals and distance learning.



Some of the training will be tailored to address state-specific issues such as multi-grade teaching in a single classroom,<sup>7</sup> creating teacher attitudes to tackle diversity in classrooms and interacting sensitively with minority groups such as tribal children.

Professionalization needs to be introduced in the teaching profession and promoted through incentives for teachers to improve their qualifications such as better pay scales and increments and more fellowships. A regional framework, which allows school teachers in the region to share their experiences and learn from each other, could promote an enthusiasm and professionalism in the profession.

### 8.1.2.3 Improving Access

In areas where access remains a problem, innovative schemes have to be set up such as non-formal education centres with active parent and community participation have to be set up. Well-monitored *anganwadis* and non-formal education centres, especially in interior and inaccessible villages will enable children to begin school at the appropriate age. Alternative ways of bringing schooling to children of peripatetic workers are being explored in the region. One successful initiative is the Mobile Teacher Programme initiated by SSA in Mizoram to reach children of *jbum* farmers in the western hills. Here, the teacher brings schooling to the children. He cycles to the settlements, carrying his blackboard, teaching supplies and textbooks and teaches local children in their own surroundings.

Given persistently high dropout rates, the functioning of various government incentives and schemes to retain children in school need to be reviewed, and even restructured so that they are effectively targeted. The effective functioning of the mid-day meal (MDM) scheme in the North East is constrained by the physical terrain, lack of manpower to implement the programme (often implemented by the school teacher alone) and the absence of monitoring. Increased community involvement, either through Self-Help Groups (SHGs) formed by mothers of school-going children in the locality, Village Education Committees (VECs), or other local bodies in the preparation or supervision would improve the quality of meals and their delivery. Low wages currently hamper implementation; hiring cooks and helpers under the National Rural Employment Guarantee Scheme could be an enticement to get helpers at minimum wages for at least 100 days.<sup>8</sup>

- Secondary school infrastructure has to keep pace with this planned growth, either through new secondary schools, adding secondary sections in existing elementary schools, opening additional sections in existing high schools, or even by running more than one shift where feasible in existing secondary schools.
- Higher dropout rates at the secondary level call for hostel facilities to be set up in middle and secondary schools, especially in areas with dispersed low-density habitations, with careful monitoring of the quality of services and security, especially for girls. In fact, one of the mandatory provisions for schools must be separate toilets for boys and girls, a recommendation that comes from the People's Vision 2020 (Annexure 15)

<sup>7</sup> Despite norms stipulating that schools have at least two teachers, upto 15 per cent of the schools in Assam and 14 per cent in Meghalaya have only one teacher (NIEPA 2005Pg 56).

<sup>8</sup> This was one of the recommendations of the Sectoral Summit on Education in August, 2007 as workers in the MDM Scheme are paid below- minimum wage.

- Based on the assumption that the presence of female teachers in schools helps in the enrolment of girls, there should be a special drive to recruit women teachers, especially in Arunachal Pradesh and Assam where the proportion of female teachers is far below the national average (Table 8.10A(a)& 8.10A(b) in Annexure 8.1).
- Special attention needs to be given to the quality of teaching in the tribal areas. The Sarva Shiksha Abhiyan (SSA) could work with state education departments to raise the level of education imparted to school children in these areas.

#### 8.1.2.4 Improving Facilities

These also play an important role in student and teacher retention.

- The medium-term goal should be to ensure that schools have enough classrooms, basic necessities such as water and toilets and facilities such as sports equipment, libraries and laboratories. Schools are an ideal nurturing ground for instilling in children clean and healthy habits, but this is possible only when water and toilet facilities exist. As the states move towards universalization of primary, and eventually secondary education, the proposed increase in enrolment is only going to increase the demand for these essentials.
- Norms on infrastructure and facilities in secondary schools should be generally equivalent to those for the Kendriya Vidyalayas. Central assistance is available for improving computer facilities through the ICT@Schools Programme, aimed at enabling computer-aided education for students in government and government-aided schools.

#### 8.1.2.5 Making learning more Relevant: Meeting the Region's Special Needs

- **Vocational Training in Schools:** The focus on relevant, job-oriented education requires more emphasis on co-curricular activities aimed at skill enhancement. The introduction of newer vocational streams even as early as Classes XI and XII could familiarize students with possible vocations and enable them to make more informed judgements about higher education choices.<sup>9</sup>
- **Incorporating Local Material:** Linking learning to local experiences would make education more relevant and raise retention rates. Some states have already started preparing materials and orienting teaching towards local environments to supplement standard textbooks. In one initiative to enhance science teaching in schools by basing it on local knowledge, Nagaland University will train school students and involve them in mapping the plant, animal and microbial resources of the region.<sup>10</sup>
- **Addressing Region-Specific Needs:** Curricula and teaching material need to be developed to address issues prevalent in NER such as the high proportion of single-classroom schools, where teachers have to teach in a multi-grade environment, the myriad dialects and languages

<sup>9</sup> The National Curriculum Framework (2005) has suggested that Vocational Education and Training (VET) be implemented in mission mode, involving the establishment of separate VET institutions and centres from the level of village clusters and blocks to sub-divisional/districts, towns and metropolitan area,

<sup>10</sup> From discussions with the Vice Chancellor of Nagaland University, Professor Kannan.



prevalent in the region and strengthening science and math teaching in the region.

- **Vocational and Job Counselling:** Appropriate guidance and student counselling reduce school dropouts (by improving performance), promote career development and instil in students the right attitudes towards studies and work. Full-time school counsellors could be appointed at different levels within the school system, and counselling needs should become an intrinsic part of pre-service teacher training.

### *8.1.2.6 Involving Private Entities*

- Private provisioning could help supplement government efforts to universalize education, especially at the secondary school level where migration out of the public school system is already fairly high (Table 8.5A in Annexure 8.1). Private schools are more in demand as they are considered more accountable for students' performance, which clearly indicates that people are willing to pay for what they perceive as better quality education.
- The establishment of well-managed private boarding schools within the region, perhaps funded by local private companies, (along the lines of Assam Valley School outside Guwahati) would help strengthen links within the region as well as having a ripple effect on income and employment generation.
- Other school-related functions could be outsourced to private agencies. They could, for example, 'adopt' a school to improve specific facilities such as the library, laboratories, computer infrastructure or sports facilities. Computer education could be entirely outsourced to the private sector which can provide equipment and teaching for a fee, relieving public schools of the burden of hiring permanent teachers and investing in costly infrastructure.

However, irrespective of the extent to which private funding can supplement public provision of education, the government will continue to be ultimately responsible for ensuring that education reaches all children in the region.

### **8.1.3 The Role of Local Governments in Education**

Raising the standard of education to equip young people with the knowledge and skills needed to increase their choices will rely greatly on grassroots participation in the delivery of education at the local level. Local communities play an important role in many aspects, such as monitoring formal and non-formal institutions and the functioning of the mid-day meal scheme.

Successful educational outcomes have been linked with increased accountability of teachers to local communities, as was demonstrated after the communitization of education in Nagaland in 2002 (Box 8.1).

Similar responsibilities can be devolved to other local government institutions functioning in the region. Many of the important initiatives that impinge on education, such as the Sarva Shiksha Abhiyan, emphasise deep community ownership in implementation through School Management Committees, Village and Urban Slum-level Education Committees and Tribal Autonomous Councils and other grassroots structures in the management of elementary schools.



### **Box 8.1: The Importance of Social Audit: Communitization of Education in Nagaland**

The Nagaland Government's experiment in communitization of education builds on the strong social ties within villages to improve the quality of primary schooling in the state. The village community owns and is authorized to develop public elementary schools within the village. Communitized villages set up a Village Education Committee (VEC) to act as the legal local authority for managing elementary education in the village. VEC has the authority to monitor teacher attendance (and take punitive action such as docking salaries for prolonged absences), and make major financial decisions (such as expenditure on textbooks, school furniture, building repairs) through access to public funds. It can arrange for inter-school utilization of teachers and recommend substitute teachers to fill long-term vacancies.

This daily participatory monitoring has yielded success: a significant improvement in teachers' attendance in 80 percent of the schools has led in turn to an improvement in students' attendance in almost all schools. Enrolment and academic performance have also improved, and parents are demonstrating an increased confidence in the public school system: in Chingmei village of Tuensang district, the local private school, which was popular among most parents, had to close down after communitization of the public school. Communities demonstrate an increased sense of ownership of the school system by contributing material and labour to repair local school buildings, footpaths and school grounds, by giving students free tuitions in the evenings and encouraging dropouts to re-enrol in the system.

Schools can build on the strong community-based structures in NER and find ways to shift accountability to parents, the community and other representative organizations such as VECs and Panchayats. Most communities need some amount of capacity building to improve their management skills and to enable them to act as pressure groups to ensure that the physical, social and academic environment in schools is of the best possible standard.

#### **8.1.4 Sports and Indigenous Games**

An important but often ignored component of education is physical development. One of the criticisms of the secondary education curriculum in the country is that it does not nurture 'multiple intelligences' innate in children, which includes the bodily-kinesthetic or sports intelligence<sup>11</sup>. The situation is no different in the North East, even though the people from the region are highly regarded for their innate sporting talent. The proportion of schools without playgrounds in almost all the NER states is below even the low national average of around 50 percent (Table 8.1), so 'education' remains confined to classroom instruction.

<sup>11</sup> Report of the Central Advisory Board of Secondary Education (CABE) committee on the Universalization of Secondary Education, 2005.



**Table 8.1: Schools without Playground Facilities**

State	RURAL				URBAN			
	primary Primary	Upper	Secondary secondary	Higher	Primary primary	Upper	Higher Secondary	secondary
Arunachal	66.46	33.12	22.94	18.02	60.81	35.29	21.84	8.00
Assam	66.31	48.68	39.42	35.35	83.86	68.60	52.46	40.59
Manipur	58.38	40.83	30.59	32.26	54.11	40.21	32.32	28.00
Meghalaya	89.94	52.05	35.68	13.51	64.88	53.33	38.34	34.88
Mizoram	84.33	86.22	88.40	33.33	88.62	81.15	88.89	86.92
Nagaland	80.55	53.25	32.82	11.11	86.29	60.88	26.60	28.88
Sikkim	58.63	26.32	18.52	2.56	100.00	100.00	28.58	25.00
Tripura	43.10	26.60	13.81	9.94	56.90	41.38	43.90	28.85
<b>All India</b>	<b>61.42</b>	<b>44.21</b>	<b>23.88</b>	<b>15.89</b>	<b>55.14</b>	<b>38.68</b>	<b>26.48</b>	<b>19.55</b>

Source: Calculated from the Seventh All-India Educational Survey, Ministry of Human Resource Development.

Learning environments that are equipped with playgrounds and sports facilities and equipment will apart from intellectual abilities allow students to explore and develop the full extent of their abilities. Good physical education facilities will not only open up new avenues for recreation, talent tapping and recognition but also help wean away older children from the deleterious consequences of alcoholism and drug addiction. Excellence in sports in the national and international arena also creates 'local heroes', men and women from the locality whom children can look up to as role models for emulation, and a source of pride. Productive engagement in the area of sports and games will also increase the scope for integration with other states. At a more basic level, physical activity is essential for health, physical fitness and to promote individual productivity.

#### *8.1.4.1. Sports: The Way Forward*

Sports and physical activity have to form an intrinsic part of the school curriculum from elementary school through to higher secondary schooling, to allow students to explore and develop the full extent of their abilities. Schools should be well equipped with playing grounds and sports equipment to fulfil this part of the curriculum.<sup>12</sup>

- Where steep and hilly terrain precludes the creation of playing spaces, schools could organize regular visits to areas where schoolchildren can engage in physical exercise.
- Physical education and sports also need to become an intrinsic part of youth organizations such as Bharat Scouts and Guides, the National Social Service (NSS), which should be promoted in the states.
- Some of the North Eastern states have a long tradition of indigenous games and martial arts, and special programmes could be set up to revive, nurture and promote these traditions

<sup>12</sup> The Draft National Sports Policy, 2008 recommends that state and local governments make available at least 1 acre of land for primary schools and 2.5 acre for upper primary schools for use as playground. Guidelines are needed for the recruitment of physical education instructors, the provision of developed playing fields and equipment.

among young people.<sup>13</sup> Two schools in the region have been identified to promote indigenous games and martial arts, one in Assam and the other in Manipur.

- The focus for training and talent spotting should be on sports and games in which people in NER have an innate ability and proven talent such as weightlifting, football, hockey and boxing.
- Media and community organizations can play a role in highlighting and spreading awareness about excellent performances by North Eastern athletes and sports people, especially women, to encourage young people to engage in serious sports.
- There is a severe shortage of professional coaches. A centre for excellence in sports can be set up in one of NER states with the facilities to train coaches.
- Regular competitive sports meets organized at the district, state and regional level (perhaps through NEC) would promote a spirit of competition in aspiring sports people.
- Educational institutions will be encouraged to build access to talent spotters to identify young people with potential in different age groups.
- Sports schools will be set up in each state, with good quality facilities, competent coaches and residential accommodation for talented players.<sup>14</sup>

### 8.1.5 Higher Education: College and Vocational Training

The vision for higher education would be to equip young people in NER with skills and knowledge to expand their life choices - whether to pursue the profession of their choice, to engage in business or explore a talent - within their state or outside. As the Jain Committee Report points out, the central objective of education should be skill building and development of entrepreneurship. The rising tide of drug use and other substance abuse, insurgency-related activity and other social ills in the region have been attributed to the limited educational and employment avenues for the youth. In addition, human resources of a high quality are necessary to realize the developmental vision for NER 2020.

Higher education in the region is characterized as 'single-track', focusing on general education and, within that, a major concentration on the arts (Table 8.11A(b) in Annexure 8.1)<sup>15</sup> - over 80 percent of the three lakh students enrolled in colleges are in the arts, which bears testimony to the assertion that the standard of science teaching is poor in the region. Further, college enrolment is very low in the region, as low as 4.7 percent in Nagaland and 5.6 percent in Arunachal against the already low national average of 10 percent (Table 8.11A (a) in Annexure 8.1). While this does not take into account the several thousand students studying outside the region, higher education within NER clearly needs to become more relevant to the population's needs.

Each of the North Eastern states now has a central university that, as an autonomous entity, can chart its own growth and development plans; several professional colleges are planned to be set up in the region over the next few years. This expansion in the 'choices' has to be

<sup>13</sup> The identified indigenous games and martial arts for the North Eastern states are: dhokhel (Assam), mukna, khong kangjei, sagol kangjei, kang, yubee, hiyang, tannaba, lamjei, cheibi gad-ga, than0tha and sarit-sarak (Manipur), inuknawr, inbuan, Mizo inchai (Mizoram), archery (Meghalaya), hole taso dukaranam, hinam, tuman, parok-pamin sinam (Arunachal Pradesh), gella-chutt (Tripura), and wrestling, cock-fighting (Nagaland).

<sup>14</sup> See the National Sports Policy, 2008 for more details.

<sup>15</sup> From the Sectoral Summit on Education.



accompanied by considerable improvement in the quality of education being imparted.<sup>16</sup> Thousands of students from the North East go to other parts of the country for higher studies,<sup>17</sup> both because of the lack of professional education as well as the level of instruction and curricula in colleges and universities in the region, both of which affect their potential for employment.

The vast amount of funding that goes towards students' studying and accommodation in universities outside the state can be viewed as 'leakages' from the NER economy, but this needs to be weighed against the costs and problems related to the setting up of education facilities of comparable quality within the region. It should also be noted that sending students out of the region for higher education helps promote national integration. Students who return, come with fresh new ideas, and those who remain outside the region encourage the rest to end their insularity from the rest of the country.

### 8.1.6 Higher Education: The Way Forward

Higher education infrastructure in the region has focused largely on producing college graduates in arts and social sciences, who have looked to the government for employment. With the saturation of this avenue, recent years have seen large-scale unemployment among the youth, which has contributed to social disruptions in the region. The emphasis in higher education needs to shift to building professional skills and developing entrepreneurial capacities and skills among younger people. The high proportion of people of school-going age means that the pressure on college seats within NER is only going to increase.

Noting that vocational training, entrepreneurial skills and the basic grounding in mathematics and science among students in NER are weak, rather than setting up more 'run-of-the-mill' universities, the expansion in the supply of higher-level education needs to clearly focus on one of three areas of training: those which fuel the development of the region, those in globally expanding professions or areas which focus on 'core competencies' of the people in the region.



DOEACC Centre at Imphal

<sup>16</sup> From various SDRs and HDRs. For example in Nagaland, less than 5 per cent of the students got a first class in the arts and law streams while less than 10 per cent passed in first class in science and commerce (Nagaland HDR)

<sup>17</sup> For example, in 2001, estimates from the Directorate of Higher and Technical Education, showed that of the 24,000 Naga students enrolled in higher studies, nearly 10,000 students were studying outside the state.



### *8.1.6.1. Courses that Can Fuel the Development of the Region*

- The increase in the number of central universities presents an ideal opportunity to gear higher education towards creating value in the region. A major thrust would be to focus on areas related to the region's need such as agro-based sciences (bio-technology, patent awareness, organic farming, water conservation, veterinary sciences and seismology), horticulture (floriculture, vegetables), agro-based industries (medicinal plants, food processing), sports medicine and physical therapy, tourism and teacher training.
- A Regional Institute of Sports, patterned on the National Institute of Sports, to tap, nurture and push new talent, could play a role in finding and exporting such talent to compete with the best.
- A Regional Institute of Sports Medicine could be another major centre of excellence that could attract trainers, coaches as well as specialist doctors and athletes/sportspersons who could benefit from treatment as in-patients
- Existing college and university courses need to be strengthened and made more relevant and current; laboratories and classrooms will need to be upgraded. Libraries will need special focus, and need to be well stocked with more recent publications and journals. The importance of raising agricultural productivity in the region requires strengthening of the Assam Agricultural University, Jorhat.
- The proposed expansion of higher education will call for well-qualified faculty especially in newer disciplines. One way to expose students to good teaching would be through open (or distance) learning courses, which have the advantage of being a need-based, technology-oriented curriculum which allows intensive hands-on training, and regular evaluation and frequent curriculum upgradation.
- State funding for students living and studying in universities and colleges in other parts of the country has to be properly targeted so that the base of beneficiaries is expanded in the region.
- Each university in the North East could set up a centre of excellence with area studies and language departments relevant to the region. Training centres would be set up in every state relating to the languages, cultures and issues of South-east Asia and China and for teaching languages of the region to scholars from other countries.<sup>18</sup>

### *8.1.6.2 Training that Taps into Opportunities Created by Global Trends*

- The 'mainstreaming' of young people from NER into the larger national and global economy will require equipping them with directly employable skills in professions that are expanding worldwide, the most obvious ones being in the IT and ITES sectors, but also in engineering, nursing, and in the hospitality industry.

### *8.1.6.3 Capitalizing on the Region's Innate Talents and Interests*

Employment opportunities are expanding, mostly outside the region for now, in areas in which people from NER have an innate talent and interest: fashion technology and product design,

<sup>18</sup> As suggested by the Steering Committee, each university could be assisted to become a national centre of excellence in areas such as languages (Burmese, Tibetan, Chinese, Thai, Nepalese, Japanese), and Area Studies (ASEAN, SE Asian History and Literature, Tribal studies, Chinese studies). This will help spread the languages and culture of NER to scholars and visitors from other countries.





airlines industry, sports and physical fitness and music, or those based on indigenous materials such as bamboo, silk, traditional textiles and so on. A centre of excellence in sports with the latest equipment and facilities could be set up in the region, with the aim of training aspiring sportspeople and coaches to meet the growing demand for coaching nationally as well as in the region. A Regional Mountaineering Institute for developing mountaineering skills among local youths would also tap into the innate abilities among young people as well as link up with the promotion of adventure tourism in the region. The formation of regional institutes, such as the North East Institute of Fashion Technology, North East Institute of Design and so on, would allow an exchange of knowledge and technology within the region, and showcase it outside.

## 8.1.7 Art and Culture

**8.1.7.1** The cultural identity of the North East is unique and indicates vibrant cultures that are reflected in the clothes of the people, especially in the traditional handloom attire, jewellery and handicrafts. Bamboo plays an important role in the life of the people, and most of the handicraft items are made from this versatile grass, which now commands an impressive market both in domestic and foreign shores. The Region has rich craft traditions, which include artistic textile weaving, cane and fiber crafts, wood carvings, jewellery, carpet making, painted wood vessels and handicrafts made of ivory and tusks. Colourful shawls with intricate designs portray the unique history and lifestyle of the different tribes.

**8.1.7.2** Few regions in the world can boast of a rich cultural amalgamation like North East India. Located amidst rivers, hills and valleys, lush green forests and awesome springs, the cultural life of the region is a reflection of the region unique ambience. The region has a rich culture with festivals, dances and music. Dances like *Bihu* (Assam), *Cheraw* (Mizoram), Manipuri classical dance such as the *rasleela*, the *Naga* dances that display victory in war, *Nongrem* (Meghalaya), masked dances of Sikkim and Arunachal Pradesh, and the colourful offerings from Tripura all constitute a colourful cultural rainbow. Festivals like *Bihu*, *Wangala*, *Durga Puja* and other occasions bring out the beauty of every tribe. The cuisine also varies from one state to another. Tripura is famous for Hindu and Buddhist temples. The North East is known for its hospitality, and every tribe has its own way of extending a warm welcome to guests.

**8.1.7.3** The rich culture of the North East has not been appropriately reflected at the State, regional and national levels.

- There is not much awareness about the protected monuments in the region even though the Archeological Survey of India (ASI) has taken an initiative to maintain such monuments in the region including temples, rock carvings, tombs, graves, rock inscriptions/sculptures, palaces and monoliths.
- There is enough scope for cultural exchanges to depict the North East culture to other parts of India and to the world.
- Awareness about Majuli as the largest river island of the world needs to be spread in the region and outside.
- Performing literary and visual arts need to engage the attention of eminent literary persons and artists.



Minister Aiyar with Bodo Dancers in Kokrajhar, Assam

- There is a need for having enough trained teachers to promote the North Eastern culture in the region.
- Scope to increase multi-purpose cultural complexes in the region.
- Many more initiatives need to be taken upon documentation, dissemination of NE art and culture and propagation of tribal arts, crafts and traditions and promoting, projecting and preserving the cultural heritage of the Himalayas and for promoting Buddhist and Tibetan cultures and traditions through research work.
- Preservation of manuscripts/rare books and conservation of archival material need to be given focus.
- Institutions in the region do not have enough capacity to take advantage of its rich art, culture and traditions.

### 8.1.8 Art and Culture: The Way Forward

- A holistic and planned approach needs to be taken up at the central, regional and State levels to draw an action plan to rope in central organizations like the Sangeet Natak Academy, Sahitya Academy, Lalit Kala Academy, Indian Museum and Regional and state organizations to depict the rich culture of the North East.
- The Archeological Survey of India need to draw up an action plan for the maintenance of centrally protected monuments in the region. These include temples, rock carvings, tombs, graves, rock inscriptions/sculptures, palaces and monoliths.
- An action plan is required for Site restoration of ruins in all the NE states
- Majuli, the largest river island in the world, need to be appropriately projected as a World Heritage Site.
- Performing literary and visual arts need to be regularly undertaken in the region by National



Academies and the National School of Drama by getting participation of local stakeholders through seminars, festivals, theatre workshops and literary forums.

- Need to set up a Centre for Cultural Resources and Training in the region with sub/centers in the NE states for promoting the North East culture in the region by training teachers.
- Need to set up multi-purpose cultural complexes in all the major cities/towns of the NE states.
- An action plan needed to comprehensively deal with the issues of documentation, dissemination of North East culture and propagation of tribal arts, crafts and traditions in the NE region and to the outside world.
- Plan to promote, project and preserve the cultural heritage of the Himalayas through support from local institutions, universities, museums and individual experts in a regular manner.
- Promoting Buddhist and Tibetan cultures and traditions by incentivising research work.
- Preservation of manuscripts/rare books and conservation of archival material for which manuscript resource centers need to set up in the region and sub-centers in the NE states.
- An action plan to organize exhibitions including reorganization and renovation of reserve collections of State museums.
- Promotion of a scientific culture through setting up of Regional Science Centres and Sub-regional Science Centres in NE States.
- Promoting and supporting a public library movement in a more liberal manner.
- Observation of centenaries and anniversaries of important national personalities and events in a regular way.
- Entering into cultural agreements with other states in the country and neighbouring foreign countries.
- Creating cultural awareness from the grassroots level in the region and organizing cultural exchange programmes at inter, intra -regional level and with the neighbouring countries.

## 8.2 Health

The vision is to achieve overall improvement in the health status of NER, both as an end in itself, and as a fundamental requirement for raising productivity and growth within the region. This will require raising access to quality healthcare for everyone, especially for children and women, tackling the major health issues in the region (AIDS, cancer, alcoholism), and raising awareness about nutrition, environmental sanitation and disease prevention and control measures. The low use of existing facilities will be tackled by improving the quality and range of services offered both by the public and private facilities, by involving other agencies and putting in place innovative techniques that have worked in other parts of the country.

The region has witnessed declining infant mortality rates (IMR) (comparing very favourably with national averages - since 1981, Manipur has had the lowest IMR in the country), an increase in child immunization and increasing life expectancies in almost all the states. Many states have set up

in impressive public health infrastructure through a network of hospitals, primary health centres, primary health sub-centres and community health centres. In fact, apart from Assam and Tripura, there is a surplus of primary and community health centres in the rural areas (see Table 8.12A in Annexure 8.1).

Despite the physical expansion of healthcare facilities, access to quality health services remains low in remote areas as well as in urban areas, especially for women and children. People still need to travel long distances to consult doctors or specialists, or to access diagnostic or therapeutic treatment; there is a shortage of trained medical staff at almost every level; and a lack of supplementary infrastructure such as roads and environmental sanitation which exacerbate health issues.

The public health policy in NER will have three objectives: to direct financial resources towards ensuring good health services in areas where private investment is unlikely to go; to create an environment conducive to attracting and retaining private health providers, with some incentives to enter certain areas, such as smaller towns; and protect consumers by enforcing regulation of private healthcare.

### 8.2.1 Providing Healthcare for All

High averages in most states mask major variation in health services across states, between urban and rural areas, in hilly terrains and so on. In some instances this is because of lopsided provisioning (as in Arunachal, where 88.5 percent of the general and district hospitals are located in the urban areas), in others because of the absence of transportation links with health centres.

As in many other states, primary health care provided in NER is generally poor in quality, inaccessible and unavailable,<sup>19</sup> (perhaps with the exception of Mizoram, which appears to have a



Minister Aiyar visiting a hospital in Kohima

<sup>19</sup> From various HDRs and SDRs.





well-functioning system which people have faith in). Rural public healthcare services are especially abysmal with high levels of absenteeism, shortages of skilled medical and para-medical staff, an absence of medicines and supplies and inadequate supervision and monitoring (see Tables 8.22A and 8.23A in Annexure 8.1).

**Low use of Facilities:** Even when health centres exist, people do not make full use of them, for various reasons such as preference for traditional health services or private providers, poor quality of care, lack of equipment, supplies and medical staff.<sup>20</sup> Thus, the mere existence of infrastructure is not necessarily positively correlated with an improvement in health conditions of the population. This has important policy implications: building healthcare centres is not sufficient to raise health standards in the region: awareness and willingness among people are as important, as is the quality of service offered.

**Dependence on Non-Traditional Providers:** Many people in the region have greater faith in the vast network of indigenous medical practitioners (IMPs) who have been dispensing health advice for decades. In states such as Nagaland and Sikkim they continue to reach out to a majority of the villages and are even part of the public health system. Apart from people's intrinsic faith in these systems of medicine, IMPs have the convenience of easy accessibility, as they often live in the village and can be consulted at all hours, unlike the more restricted hours of health centres and doctors.

**Lack of Tertiary Care:** There is an overall lack of modern medical diagnostic and therapeutic aids in the existing facilities even in urban areas and severe shortage of medical specialists, especially in the hill states. The few laboratories and ancillary diagnostic facilities that exist, especially in Arunachal Pradesh, Manipur and Nagaland, are fairly primitive. Patients with serious ailments or complications, or requiring advanced investigations have to travel outside the state, to Guwahati, Kolkata or Delhi, for treatment. The costs of reimbursing medical expenses for government employees to the public exchequer are very high, not to mention the out-of-pocket expenses of non-governmental patients.<sup>21</sup> Whether it is lack of funds, general apathy, corruption or distances that create an absence of supplies and staff at public health facilities, the outcome is that many people even among poor families now avoid using the existing public health facilities.

#### Box 8.2: *Akha*- Ship of Hope

On the *saporis* or river islands of Assam that are inundated with floods every time the mighty Brahmaputra unleashes its fury, life is a constant struggle against disease and deprivation. Some 30 Lakh people live in 2,300 remote, floating villages on the Brahmaputra in Upper Assam. Here, there are no functional *anganwadis*, no health centres, no schools, no power, not even drinking water. Till recently, immunization, ante-natal care, disease management and treatment were all unheard of. Then in 2005 the Centre for North East Studies and Policy Research (C-NES) intervened. It partnered with NRHM, UNICEF and the government of Assam, to start *Akha* (meaning hope in Assamese) a 22 metre long, four metre wide ship that carries hope and healthcare to 10,000 forgotten people in Tinsukhia, Dhemaji and Dibrugarh

<sup>20</sup> National-level data shows that even when free, poor and rural populations often prefer to pay for private and traditional healers, rather than visit public health centers. Low institutional births in the NER indicate that the trend is the same in this region (Table 6.14).

<sup>21</sup> The cost of reimbursing government employees for treatment was estimated at Rs. 20 crore annually in Nagaland (*Nagaland HDR*), added to this is the non-reimbursed costs of non-government patients.



districts of Upper Assam. The 120 hp powered Akha has an OPD room, cabins for medical staff and ship crew, medicine storage space, a kitchen, two toilet cum bathrooms and a general store. A generator set and a 200 litre water reservoir are also installed to ensure that the medical team which travels to the *saporis* has adequate power and water supply. The idea behind *Akha* is simple use the river to tackle the problems and challenges created by it. Doctors and ANMs who are unwilling and unable to survive on these remote islands, live on this ship stocked with medicine and other supplies and hold health camps on the *saporis*. They immunize, treat, provide medicines and advise people on preventive measures. They even take critically ill patients to the nearest health centre in Dibrugarh. In less than two years, *Akha* has provided succour to many. If we can upscale this innovative intervention under NRHM, healthcare will no longer be a distant reality for the people living on this highly volatile river. It can be upscaled to include a hospital ship with diagnostic facilities, an inpatient ward and Operation Theatre. Then healthcare would become truly inclusive.

## 8.2.2 Focusing on Child and Maternal Health

Although infant mortality rates (IMRs) have decreased overall, they are still higher than the national average in some states (Table 8.13A in Annexure 8.1). Surprisingly few children have been vaccinated against diseases in spite of high female literacy rates and favourable sex ratios in the region. Most worryingly, child malnutrition is on the rise in five of the eight NER states and female anaemia levels are high (Charts 8.4 to 8.6).

Rural women, especially in remote and inaccessible areas have some of the poorest health indicators. The maternal mortality ratio (MMR)<sup>22</sup> has been declining in Assam (the only NE state for which data is available from the SRS) but at 490 is still far higher than the already high national rate of 301.<sup>23</sup> While there has been an increase in institutional births across the country, over 50 percent of the births in NER (apart from Mizoram) take place outside an institution (Table 8.14A in Annexure 8.1). The situation is particularly serious in Nagaland, where barely one in ten babies is born in an institution.<sup>24</sup>

Very few deliveries are assisted by a medical professional: only one in four deliveries in Nagaland was professionally assisted (26 percent overall and only 18 percent in rural areas), and less than one-third in Assam, Meghalaya and Arunachal, way below the already low national average of 48 percent. This lack of interaction with health providers has important implications for maternal and child care including nutrition and disease prevention, immunization, child healthcare and family planning. Urgent attention should also be paid to increasing the number of assisted births (by a well-trained midwife or doctor), who can manage 'low-risk,' routine deliveries and also recognize and refer cases with major obstetrical complications.

**Environmental Sanitation:** Public health services are also judged by their ability to prevent the onset of diseases. Water-borne diseases like diarrhoea, cholera and infectious hepatitis account

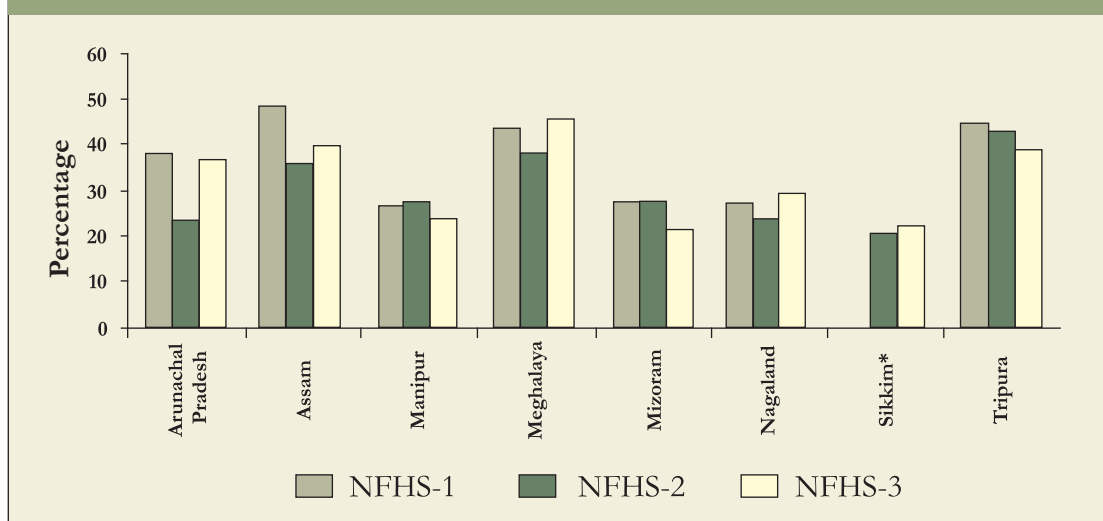
<sup>22</sup> The number of maternal deaths per 100,000 live births.

<sup>23</sup> <sup>1</sup> From 2001-03 Special Survey of Deaths using RHIME (representative, re-sampled, routine household interview of mortality with medical evaluation) from <http://www.censusindia.net/> Maternal\_Mortality\_in\_India\_1998-2003.doc

<sup>24</sup> There is a clear correlation between the proportion of non-institutional deliveries and neonatal and infant mortality rates. Kerala has the lowest NMR, with 95.8 percent institutional delivery rate, and the corresponding figure for Tamil Nadu is 89 percent; Bihar and Uttar Pradesh with institutional deliveries of less than 25 percent, have predictably high rates of IMRs between 80 and 88 per 1000 live births. *Mid term Appraisal of the Tenth Plan.*



Chart 8.4 : Underweight Children Aged 3 and Under

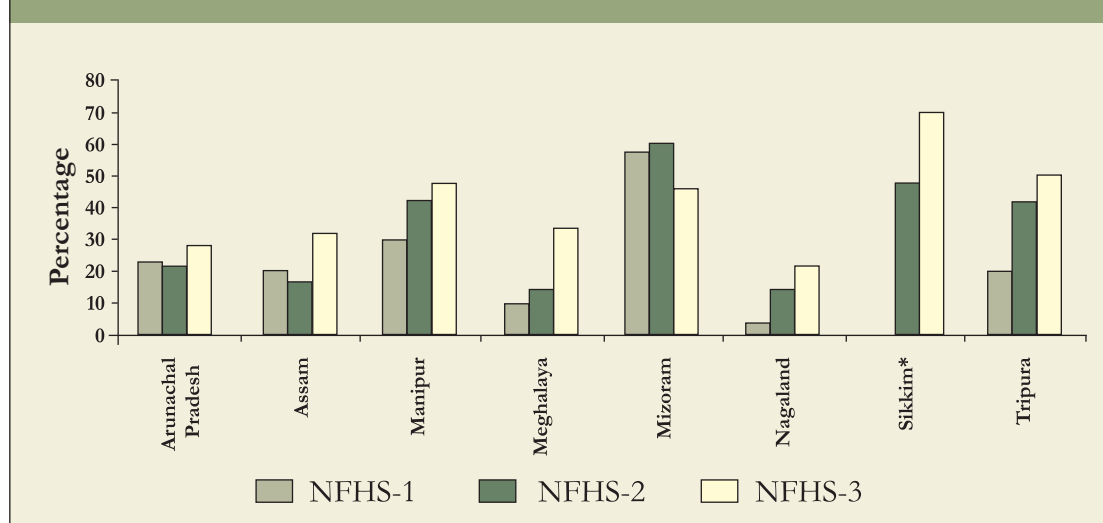


Source: *National Fact Sheet*, National Family Health Survey (NFHS-3), 2005-06, Ministry of Health and Family Welfare

for a large proportion of NER's health problems, much of which are caused by poor sanitation and water supply. Many communicable diseases can be prevented by appropriate sanitation systems. The lack of drainage in most households in NER (a higher percentage than the national average) also contributes to a potentially disease-infested environment.

**Proliferation of HIV/AIDS** is a major public health problem especially in Manipur (which has the third highest rate of sero-prevalence in the country after Maharashtra and Tamil Nadu) and Nagaland. The incidence of cancer in the NER at 128 per lakh people is reportedly three times higher than the national average (43 persons per lakh people). The information available suggests a high incidence of oral cancer in males and females, attributed to the widespread use of *paan masala*, beetle nut and tobacco.<sup>25</sup>

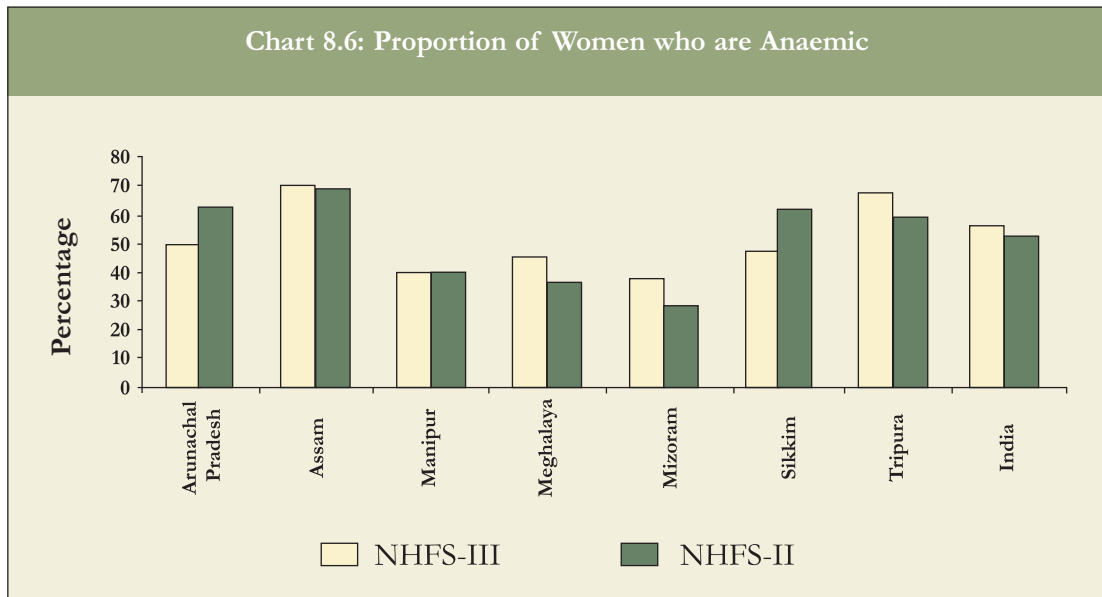
Chart 8.5: Proportion of Immunised Children (12-23 months)



Source: National Family Health Survey 1,2 and 3

<sup>25</sup> Data from NFHS-2 shows that Mizoram and Meghalaya are two states in the country where over 55 percent of men still smoke; in Nagaland and Manipur over 35 percent of men currently smoke.

Chart 8.6: Proportion of Women who are Anaemic



Source: National Family Health Survey 1,2 and 3

### 8.2.3 Health: The Way Forward

As the discussion above shows, limited outreach combined with sub-optimal delivery has led to poor health outcomes in the region. The current focus on curative health interventions needs to shift to preventive measures; we also need an expansion in people's access and use of health services, private or public; an increase in awareness about infant and maternal health, prevalent diseases and vastly improved environmental sanitation.

#### 8.2.3.1 Increasing access to Primary Healthcare

Several of the issues relating to poor rural healthcare are being addressed by the National Rural Health Mission (NRHM) set up in 2005 to address gaps in rural healthcare.<sup>26</sup>

- Innovative interventions that bring healthcare and awareness about health and nutrition to people should be strengthened or evolved such as the system of boat clinics (See box 8.2) that service the riverine char areas, or mobile units attached to referral hospitals.
- In areas where it has been difficult to get doctors to work full time, public health professionals or even fully trained nurse clinicians could be appointed to head PHCs (as in Tamil Nadu where PHCs are often managed by three staff nurses in lieu of one doctor). Arunachal has started working with non-conventional agencies such as private trusts to manage their health facilities (see Box 8.3).

<sup>26</sup> As part of the National Rural Health Mission, integrated district health plans will have a holistic approach which integrates health determinants with safe drinking water, sanitation and nutrition. As funds are not tied to a specific objective, states have the flexibility to focus on areas important to them. The Mission locates an Accredited Social Health Activist (ASHA) in each village. Its emphasis in the North East given the shortage in services of doctors and specialists, is recruiting, training and upgrading the skills of locally recruited ANMs, nurses, mid wives and para-medics.

### Box 8.3 Managing PHCs through Trusts

The Arunachal Pradesh Government recently handed over the management of Primary Health Centres (PHCs) in 16 districts to private medical trusts such as the Voluntary Health Association of India (VHAI) and the Karuna Trust as part of the National Rural Health Mission (NRHM) initiative. The trusts are now responsible for the entire functioning of the PHCs, and for the provision of all health services. They engage medical and other health workers and are responsible for full attendance at all times. The government will pay for staff, drugs and consumables. Functioning and arrangements will be monitored by a PHC management committee and a state steering committee, on the basis of output-based performance indicators. So far, nine PHCs have been outsourced to the Karuna Trust, five to VHAI and one each to JAC (Prayas) and FGA (Itanagar).

*Source: Draft Report on the Recommendation of the task force on Public Private Partnership*

- Communities play a very important role in people's lives in NER, whether it is through Panchayats, tribal councils, church-based organizations, or village committees, and can be effective in spreading primary health care in more remote communities where the hilly terrain prevents the efficient delivery of the health services to the most needy in the interiors.
- A major option would be to train Panchayat members in basic healthcare, so that they can manage the PHCs. Rural PHCs could be handed over to panchayats who could run them with the support of health-based NGOs in the region such as the Voluntary Health Association of India, the Red Cross Society and Association of Social Health in India. Appropriate capacity will need to be developed consistently over a period of time among Panchayat members to enable them to manage PHCs effectively.
- Nagaland's experiment to communitize health care in its villages may be highlighted for partial or complete adoption in other states (Box 8.4).

### Box 8.4: Communitization: An Innovative Health Intervention

At primary healthcare levels Nagaland's experiment with communitization of healthcare is proving successful. The management and maintenance of health facilities by the village community has improved staff attendance and ensured that salaries are disbursed on time, medicines are available and services are in line with community needs. The experiment has worked because it has engendered a sense of ownership of the facilities: each household contributes Rs. 10 for maintenance of the facilities; villagers organize cleanliness drives and have donated community-built houses for sub-centres and staff quarters; and in some villages private medical practitioners volunteer their services on fixed days at the health facility. In Khuzama village, villagers have started cultivating vegetables on community land to raise funds to supplement the stock of medicines and medical supplies.

*Source: Nagaland HDR, field visits*

- Given their reach into remote villages, traditional healing practices should be integrated into the healthcare framework by providing indigenous medical practitioners (IMPs) a platform for their practice, and training them to address health priorities in the region at all

levels sub-centre, PHC and CHC. Community health NGOs and doctors could work with IMPs to fill in the scientific gaps in treatment to bring them in sync with today's needs and environments. There will be additional benefits for the environment as this will help preserve traditional medicinal knowledge systems and protect and conserve the region's biodiversity. Some form of licensing of IMPs will be needed to ensure the quality of services provided.

- Health Insurance: NRHM has proposed health insurance for vulnerable groups to reduce their expenses when visiting a government hospital,<sup>27</sup> and expand the use of government hospitals.<sup>28</sup> However, given the few hospitals in the rural areas of the region, hospitalization-based health insurance may not be the solution. Here, providing insurance for out-patient care and transport would be a reasonable option. This could be outsourced to a credible NGO in this region on a pilot basis. Micro-health insurance can also be promoted through Self Help Groups (SHGs) as one of the main reasons SHG members take loans is to meet medical expenses.

The low doctor-to-population ratio in the region has been attributed to the low proportion of medical colleges in the region (which has only 3 percent of the medical seats in the country).<sup>29</sup> An increase in the number of seats within the region is called for, either by expanding the capacity of existing medical colleges, or setting up new colleges with private partnerships. The location of new medical colleges outside urban areas would add an impetus to overall health services in more remote areas, and also encourage medical students to move away from their urban areas. State assistance should be available for developing infrastructure for medical education particularly in nursing and para-medical. Private investments can be also encouraged in this sector.

### 8.2.3.2 *Involving Private Provisioning in Health Services*

Apart from the unsustainable burden on the government, it is clear that users themselves are seeking choices beyond the public health system (Table 8.15A in Annexure 8.1). As much as 25 per cent of the people below the poverty line depend on private hospital facilities for their health needs, indicating that apart from the need to enhance the quality of public services, people are willing to pay for good health facilities. The private sector is already engaged in NER either in partnership with state governments or alone at all levels of health care: by managing public health facilities, running major tele-medicine units within a public hospital (see Box 8.5), providing laboratory and blood screening services at the secondary and tertiary levels (Tripura) or operating a full-fledged hospital within a medical college (Sikkim Manipal University).

Some caution has to be exercised in the rapid expansion of private services to fill the vacuum of public provisioning in the absence of any controls, as this has often resulted in sub standard services to people. Ideally the private sector would function within the overall health policy framework for each state to achieve shared health outcomes. Regulation on private healthcare across the country has had limited efficacy, and the North East is no exception. Some states have passed legislation related to this, but of greater importance is the state governments' ability and interest in enforcing regulation, to protect people's rights.

<sup>27</sup> People incur expenses even when they visit a public hospital (NSSO 60<sup>th</sup> Round).

<sup>28</sup> NRHM: Framework for developing health insurance programmes: *Some Suggestions for States*, Ministry of Health & Family Welfare.

<sup>29</sup> Background Papers Report - National Commission on Macroeconomics and Health, 2005. From the Report of the Task Force on Medical Education for the National Rural Health Mission, Ministry of Health and Family Welfare Government of India.





### Box 8.5 Improving Specialty Medical Care in Nagaland through Tele-medicine

Tele medicine could be the answer to two major impediments to top-quality healthcare in the North East: the remoteness of most areas and the almost complete absence of medical specialization. Given the poor quality and out-datedness of the medical facilities in the state, patients invariably had to go outside for medical intervention. To fill this void the Apollo Hospitals Group recently set up the Tele medicine Centre at the Naga Hospital in Kohima in collaboration with Marubeni India Pvt. Ltd. The Naga Hospital is now tele medically linked with the Indraprastha Apollo Hospitals in Delhi, allowing medical practitioners in Kohima to access expert advice from specialists, transfer medical records and images and even get real-time assistance for complex procedures being undertaken in Nagaland.

By significantly raising the level of medical facilities available in Kohima and negating the need for locals to travel for treatment, the new Centre has drastically reduced medical expenses. Video-conferencing-based medical programmes in the telemedical facility also allow doctors practicing in Nagaland to upgrade their skills.

Sources: Apollo Website and *Nagaland Human Development Report* .

However, it is important to note that whatever the public-private mix of finance and provisioning, the government is eventually responsible for making available essential health services to poor people, in as efficient, effective and equitable a manner as possible.

#### 8.2.3.3 Prevention and Spreading Awareness

Many health interventions such as improving child health and maternal care, and the prevention of the spread of HIV/AIDS and cancer will call for increasing people's awareness about the importance of environmental sanitation, preventive measures such as immunization and so on. Popular media such as television and radio should be used as much as possible to inform people of preventive measures, more nutritional practices, for home counselling and other health interventions.

- Healthcare providers (traditional birth attendants, ANMs, MPWs, *Anganwadi* workers etc.) can be trained to impart good infant and young child feeding practices during ante- and post natal check-ups. This will obviously be more successful with increasing interaction between people and healthcare institutions or trained medical workers.
- All dwelling units should be equipped with sanitation facilities and adequate water supply by 2010.
- Awareness on HIV/AIDS and the negative outcomes of drug abuse and the treatment needs to be spread through all possible agencies,<sup>30</sup> HIV care and support should be mainstreamed into the PHC system; and treatment and post-care centres for recovering addicts (including reintegration interventions such as vocational training, counselling and mainstreaming them) need to be set up. At the state level, one of the most important tasks is to check cross-border drug trafficking.

<sup>30</sup> The recommendation is to use diverse channels the postal network, village kiosks, *e-boupals*, retail outlets, the local barber, cobbler, *dbobi* and *paanwala* along with marketing networks of FMCGs to disseminate health-related information and health products (from the *Eleventh Plan Report on PPPs in Healthcare, Planning Commission*)

The role of NGOs and religious organizations in actively addressing the proliferation of HIV/AIDS needs to be highlighted, well-defined and coordinated within the overall public policy framework so that they work in consonance with government departments. For this they will need support from the government in the form of skills and capacity building and possibly funding.

#### **8.2.4 The Central Role for Local Bodies in Public Health**

Many of the above recommendations recognize the central role of local bodies in improving the health outcomes in the region. The National Rural Health Mission (NRHM) strategy also places Panchayats at the forefront of its programmes. It proposes to train and enhance the capacity of Panchayats to own, control and manage public health services and promote access to improve healthcare at the household level through a female health activist (ASHA). ASHA is chosen and accountable to the Gram Panchayat to act as the interface between the community and the public health system. Panchayats are also involved in Rogi Kalyan Samitis for good hospital management. Members of PRIs will be trained in health issues, and this could be combined with training on public health, to provide a more holistic approach to health outcomes.

### **8.3 Basic Services**

Good sanitation and drainage, clean water, electricity and permanent housing structures are now considered necessities and preconditions for development. States have made efforts to increase the reach of these services, but there are still large gaps and thousands of households still do not have these necessities. Poor access to amenities in rural areas coupled with the lack of non-farm employment opportunities has propelled people to move to urban centres. Increasing urbanization along with the expansion of the administrative sector over the past decade have in almost every state resulted in untrammelled, unplanned urban growth and pressures on urban amenities, with serious implications on the environmental and economic sustainability of these towns.

This section first looks at the 'quality of life' indicators in NER (sanitation, sewage and waste disposal, water supply and electricity), and then analyses the pattern of urban development that is taking place. The vision would be to improve living conditions and increase access to amenities and employment opportunities (especially non-farm employment) in the rural areas, so that the rural-urban disparities, so stark in the region, are reduced.

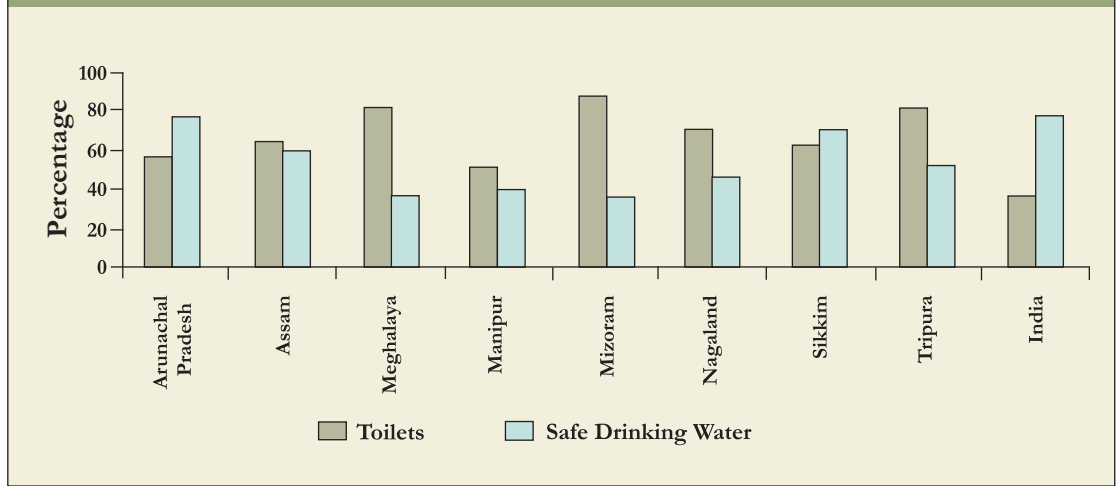
#### **8.3.1 Sanitation and Sewage Disposal**

If their statistics are to be believed, NER states have done fairly well in providing households with toilet facilities in their dwellings (Table 8.19A in Annexure 8.1). However, specialists say that households in a state like Assam have barely 8 per cent toilet coverage while Meghalaya has reported 11 percent in a survey done for the World Bank (report by Group of Consultants, to Government of Meghalaya on Rural Drinking water Supply and Sanitation in Meghalaya, May 2007). Large





Chart 8.7: Households with Access to Toilets and Safe Drinking Water



Source: Census of India, 2001

disparities continue to exist between rural and urban supply. Drainage continues to be a problem (Table 8.19A in Annexure 8.1) both in the rural and urban areas. The lack of sanitation, poor systems of sewage and disposal of solid waste (and lack of safe drinking water) are among the main reasons for poor health and high morbidity levels.

### 8.3.2 Shelter

Housing is central to improving people’s quality of life. Data related to housing in the North East (Table 8.17A in Annexure 8.1) can be somewhat deceptive because of the definition of permanent structures: in the national census, houses built with bamboo and cane are classified as temporary structures (*kutch* housing). However, this style of building is the natural outcome of the resource base of the region, and traditional building styles and techniques. Thus, NE households uses bamboo and wood to construct walls however, there is an increasing shift to metal sheets and concrete.

A more appropriate path for improving the quality of housing in the region, as observed by the study team, given the abundance of bamboo, is being initiated in some of the Cane and Bamboo Technology Mission offices.<sup>31</sup> This is clearly a more appropriate technology for NER, based on the use of low-cost local materials, and eventually more sustainable in the long run.

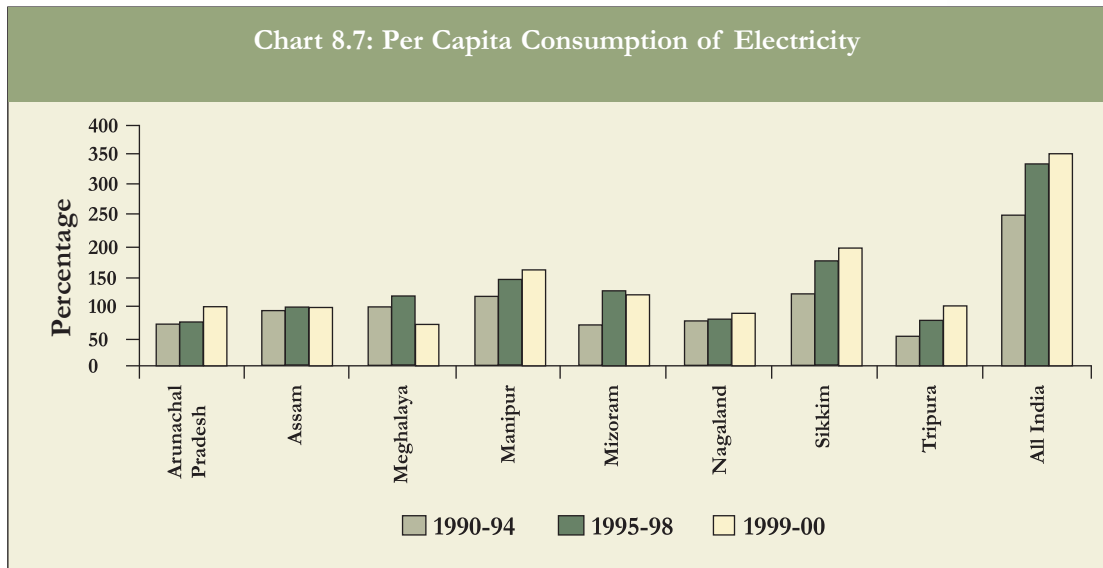
### 8.3.3 Water Supply

While the supply of good quality water to NER has increased over the last 20 years, the proportion of households which have access in all states, apart from Arunachal and Sikkim, is still below the national average (Chart 8.7 and Table 8.18A in Annexure 8.1). Rural water coverage is particularly poor in Manipur, Meghalaya and Mizoram, where less than 30 per cent of the households have access to safe water. A higher proportion (than the national average) of both urban and rural

<sup>31</sup> Different forms of bamboo thatching, reinforced with water-repellent surfacing, are being experimented with in the Cane and Bamboo Technology Missions at Dimapur and Guwahati, as also the use of bamboo to build sturdy, strong walls (Study team report).



Chart 8.7: Per Capita Consumption of Electricity



Source: Planning Commission (2002)

residents in the NER has to ‘fetch water from far away’ (Table 8.19A in Annexure 8.1). Interestingly, the urban areas of the North East are less fortunate in basic services when compared with the national averages (the urban deprivation index for several NER states is higher than the national index Table 8.19A in Annexure 8.1), while the rural deprivation index for almost all the NER states is better than the national average.

The slippage in water provisioning between 1991 and 2001 in states like Manipur and Sikkim exposes a major problem in this area, which is not asset creation, but the critical need to sustain the schemes through appropriate maintenance mechanisms. High maintenance costs, which state governments are increasingly finding difficult to meet have resulted in an erosion of the ground covered in giving access.

### 8.3.4 Roads

Good road connectivity of habitations, especially in the villages, with neighbouring towns and district headquarters, has become a vital precondition for development, especially in this region with its almost total lack of rail and air networks. A poor road network linking rural areas with urban centres has been responsible for their relative isolation and precluded large proportions of people from fully participating in the development of the region. Roads are the main support system for improving access to health and education, quite apart from access to other services, markets and amenities.

Road connectivity is, therefore, a useful indicator of the ‘inclusionary’ aspect of development process and, perhaps, reach of the market as well. It is particularly relevant in the Indian context where over 80 per cent of the population continues to live in rural areas and where over 50 percent of villages with population of less than 1000 are yet to be connected by roads (National Human Development Report, 2007).



### 8.3.5 Electricity

Access to electricity is a basic necessity, and while some progress has been made in the region (Table 8.20A in Annexure 8.1), in Assam only 24.9 percent of the households have electricity connections. Further, the rural-urban gap in access to electricity is still very large in states such as Assam, Arunachal Pradesh, Meghalaya, Nagaland and Tripura.

A very different and more accurate picture emerges, however, when we look at the per capita use of electricity in NER (Chart 8.8, Table 8.21A in Annexure 8.1), which is far below the average per capita consumption (planning commission,2002). The unfortunate reality in the north east is that while a substantial proportion of houses are 'electrified' there is hardly any electricity available for them.

## 8.4 Managing Urban Growth

A separate section on urban development is important in this vision document because of the important role the urban centres play as drivers of growth, by being effective commercial and administrative hubs for the rest of the state. Further, all the urban centres in NER (as in several other parts of the country) have started experiencing serious problems from pressure on the basic services as discussed above, but also as a result of unplanned urban development leading to undesirable environmental and social outcomes. In Agartala, the study team observed open drains lining almost every street, which were infested with mosquitoes, the almost complete absence of any street lighting which made it difficult to walk outside at night and frequent power black outs. Urban slum population is as high as 65 percent in Shillong and 16 percent in Agartala.<sup>32</sup> The poor suffer the most from the high prevalence of water-borne diseases on account of lack of access to safe drinking water. Studies in many metropolitan cities show a higher rate of diseases and longer duration per illness from poor quality of drinking water supply in slum areas.

The corresponding influx in hill capitals such as Gangtok, Aizawl, Shillong and Kohima is beginning to have environmentally unsustainable outcomes, given the scarcity of land and the fragility of the environment. Buildings are constructed flouting existing regulation, adjacent to mountain streams and in violation of height restrictions. The lack of a public transport system in many of the cities (Gangtok, Imphal, Aizawl) means that people have to rely on taxis for all their transport needs, further adding to the congestion on the narrow roads and to parking problems. The explosion in the vehicular population has added noise and air pollution to the concrete mass of construction, and with the pressure on land, has eroded all the greenery of these mountain environments. The scarcity of land in these hill environments exacerbates the problem of effective solid waste disposal.

Urban development, such as it is in NER, has been skewed spatially with its focus on capital cities such as Imphal, Gangtok and so on, to the neglect of other towns in the states, such as district headquarters. In Nagaland, this has led to the migration of people to Dimapur and Kohima not only from the rural areas, but also from smaller urban centres, because of their relative lack of urban infrastructure and employment opportunities.<sup>33</sup> The further pressure this places on the urban services and infrastructure of the relatively better developed towns needs to be factored in when urban strategy is planned. At the same time, it is important to develop infrastructure and

<sup>32</sup> Slum Population, Series 1, Primary Census Abstract, Census of India 2001, from *Urban Finance*, vol. 8, no. 4, October-Dec 2005, p. 8.

<sup>33</sup> *Nagaland Human Development Report*



services in the smaller cities so that they do not disintegrate into ‘ghost towns’ with deteriorating civic amenities.

Much of the urban congestion results from administrative activity government offices and officers moving about to meet each other. Here, the shifting of several government offices away from the main city centres in Guwahati, Aizawl, and Kohima are excellent efforts to reduce traffic congestion. Imphal and Gangtok have similar plans to decongest their city centres which should be implemented as soon as possible.

### 8.4.1 Basic Services and Urban Development: The Way Forward

Various reports have suggested ways to improve basic services in NER, all based on the accepted view that development in the region will only be possible if there is a vast improvement in the quality of overall infrastructure, and services (see Annexure 8.2 for a summary of these). Our recommendations reiterate most of these suggestions

#### 8.4.1.1 *The Way Ahead: Central Role for Local Governments*

The provision and expansion of basic services itself creates a large amount of employment. Direct employment is created by the actual setting up of these labour-intensive activities; the presence of these services will attract industry and commerce, which in turn will create indirect employment.

- The newly introduced concept of a PURA (see Annexure 8.3), by improving rural services and employment opportunities, presents a possible solution to rapid urbanisation.


#### **Box 8.5 : Nagaland’s Water Communitization Experiment**

Village communities in Nagaland are being made responsible for water maintenance as part of the communitization process. Before this, the PHE departments were responsible for thefts, leakages, waste, distributions, and so on. With communitization, users are responsible for acquiring the land for catchments and installations, designing schemes to suit their needs, sharing the costs (5-20 percent of the total), implementing the scheme (clearing forests where needed, and taking up civil works) and, after commissioning, taking over its operation and maintenance. Maintenance costs will be borne by consumers through their own efforts at resource mobilization by levying a fee on users at a government-approved rate.

Communitization of water is a demand-driven approach: users come to the government agency for technical support related to water supply. The PHE Department will supply and install the water pipes and service reservoirs, help in scheme selection designs and evaluation to ensure sustainability of the investment and ensure effective integration of the project components in the village. It will train Village Watsan (water and sanitation) Committees on maintenance, basic repairs, revenue collection, and resource mobilization through workshops, seminars, posters, and audio-visual publicity.

- Communities working with NGOs, community-based organizations, church-based organizations, or Panchayati Raj institutions are the most effective agents for delivery of services. The Swajaldhara Scheme, being implemented in various parts of the region, relies on a high degree of involvement from local participation through water users’ associations or PRIs in the implementation and maintenance of water supply. The responsibility of





water supply has shifted to the village Panchayats and to promote community participation and improving the management of water supply, Public Health Engineering Departments are providing services to strengthen capabilities of the several user communities that have been formed in the villages. A similar experiment is being initiated in Nagaland (see Box 8.5).<sup>34</sup>

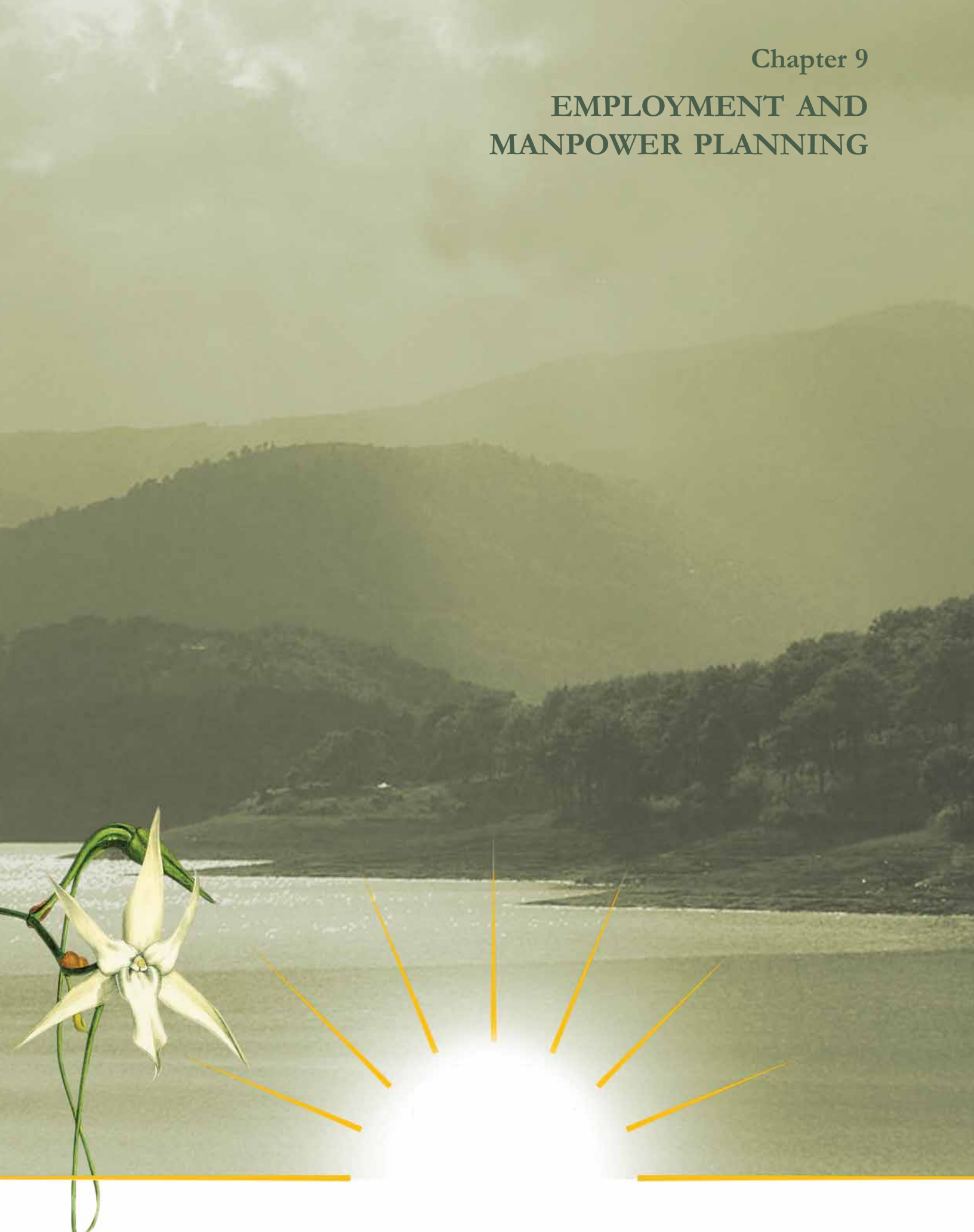
- Similarly, in the area of sanitation, the Total Sanitation Campaign (aimed at providing subsidized individual and community latrines) is part of the core responsibility of every Panchayat, especially the Gram Panchayat. While achievements are often impressive in terms of latrines constructed, without the creation of public awareness and social sanction against open defecation, the programme targets are in danger of slipping back.

### 8.4.2 Managing urban development

- Many of the problems related to urban development in the North East require urgent attention, and fortunately the imminent implementation of JNNURM has persuaded many of the state governments in the North East to begin instituting safeguards against further haphazard growth and unregulated construction, to levying some modicum of recovery charges for essential services and to involving residents in the planning and implementation of development by the setting up of elected urban local bodies.
- JNNURM has the potential to transform infrastructure and vastly improve civic amenities in selected cities, but it may not be enough to cope with the scale of urbanization expected in the coming decades as populations move out of villages in search of jobs. It is imperative to begin the process of development of new townships and growth centers. New growth centers could be created around existing small and medium towns or around mega-industrial or infrastructure projects or set up in the periphery of mega cities. These centers would ideally be located along existing or proposed high-capacity transport corridors.
- Much of the traffic congestion in the small hill capitals such as Gangtok, Aizawl and Kohima results from government activity. The speedy implementation and use of e-governance could facilitate video-conferencing and telephone conference calls, minimizing the need for travel within the city. But the longer-term solution being implemented in Aizawl (and already in place in Guwahati) is the relocation of government offices and departments away from the main city centre.
- Most urban centres in the hills have no public transport system within the city, and are serviced by mini-cabs or shared taxis. The introduction of mini-buses, capable of carrying 10-15 passengers, perhaps through private-public partnerships, would have a beneficial effect on vehicular decongestion and air pollution.
- There are few playgrounds or green areas in the town limits, and these need to be built into any plans for urban areas.
- Buildings can be constructed keeping in mind the traditional cultural aesthetics of the region or state, and using materials locally available, which would be more appropriate and instil in people a pride in their heritage. Building government offices along these lines, which would have an excellent demonstration effect, could make a beginning.

Chapter 9

# EMPLOYMENT AND MANPOWER PLANNING





# Employment and Manpower Planning

Augmenting human capabilities in the region will require building skills among people so that they themselves become agents of change and development, and at the same time raise the potential for employment. The strategy for inclusive growth necessarily involves skill development as it not only increases wage employment opportunities but also creates avenues for self/employment. Employment growth will be a crucial objective of a people-based development strategy, as it raises standards of living, improves access to basic services and leads to an overall improvement in social welfare. The large youth population in the region, with over 30 per cent of the people between the ages of 15 and 29 years in Nagaland, Manipur, Mizoram and Sikkim (against the national average of 26.5 per cent) makes a focus on employment creation an essential element in planning for NER (Table 9.1A in Annexure 9.1). Creating job opportunities is a challenge for a development strategy for any State or region but more so in NER with its largely agrarian economies, low levels of industrial activity and significant dependence on the public sector for employment-creation opportunities. At the same time, the supply of manpower has been constrained by the lack of good quality professional and vocational training in the region that would raise the skills base and boost entrepreneurial abilities.

While the region witnessed a rapid expansion of employment in the 1980s and 1990s, most of the job creation took place within public administration in response to the formation of new States, the need to establish an administrative machinery and possibly to compensate for the lack of employment opportunities from private investment (Table 9.2A in Annexure 9.1). The share of public sector in overall employment was as high as 96.8 per cent in Manipur in 200 (Chattopadhyay, 2006). That this situation is unsustainable for any length of time is evident from the widening gap between per capita GSDP in the region and the average per capita GDP for the country as a whole.

Two essential elements of any strategy for increasing employment are: (i) expanding economic activity to raise the demand for different levels of skills, which would in turn facilitate the shift to a high-growth economy; and (ii) human capital development, which would essentially mean an enhancement of employable skills.

## 9.1 Employment and Population Dynamics

The significantly young population in the region<sup>1</sup> reiterates the need for careful manpower planning and employment generation over the next few years. Employment generation has undergone a crisis of sorts in the aftermath of the freeze on public sector jobs in the last plan period, but surprisingly rising unemployment and underemployment are concomitant with high wage rates, especially in the hill States.

The region is still very dependent on agriculture for employment both in the rural and urban areas, with 85-88 per cent of jobs still concentrated in this sector. The significant unused

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<sup>1</sup> As much as 18.6 per cent of the population is in the 20-29 years age group and 10.2 per cent in the 15-19 years age group. (See Table 9.1A in Annexure 9.1)





cultivable area, especially in the hill States indicates that the farm sector still has the potential to provide livelihoods (NEDFI, 2003). However, declining productivity in agriculture calls for some degree of Government intervention in creating livelihood opportunities in the region. As in the rest of the country, there was a steep decline in the number of cultivators and an increase in the number of agricultural labourers during the 1990s (Table 9.3A in Annexure 9.1), but the situation in NER is exacerbated by the limited livelihood opportunities in both the farm and non-farm sectors. However, the growing number of 'other workers' indicates that there was some improvement in the non-farm employment scenario in the 1990.

Some encouraging trends are that the proportion of rural self-employed people increased in many of the North Eastern States between 1999-2000 and 2004-05, and the share of casual labour fell, especially in Assam, Sikkim and Nagaland (Table 9.4A (a) in Annexure 9.1). The trend in urban areas is somewhat similar during the same period, except in Assam and Meghalaya where self-employment fell, the share of regular employment increased, and casualization of labour increased marginally in Assam (Table 9.4(b) in Annexure 9.1).

Unemployment declined marginally between 1993-94 and 1999-2000 in Assam, Arunachal Pradesh and Tripura, but increased in the other five States, a situation which has been more adverse for women and in urban areas (Tables 9.5A (a), (b) and (c) in Annexure 9.1). Rising unemployment and underemployment has been accompanied by wages that are higher than the national average and in general rose between 1999-2000 and 2004-05 (Tables 9.6A (a) and (b) in Annexure 9.1). Underemployment with high wages presents a paradoxical situation. High wages could be a serious constraint to private investment, especially from outside NER, given that regulations and local conditions in some hill States restrict the free inflow of labour.<sup>2</sup>

## 9.2 The Way Forward: Recommendations for Manpower Planning

A vision that emphasizes building capacities and opportunities would have a two-pronged approach of developing human capital and expanding economic activity to boost employment in the region.

### 9.2.1 Developing Human Capital

The strategy to create a pool of employable people in the region will be based on a holistic planning framework that compasses interventions that begin at the school level and continue beyond to draw in people from all levels of education, and provide them options for training and skill building. While the best option for the large number of children who do not complete school would be attempting to retain them within the school system, some manpower planning would be required for those who leave the system after the Xth Grade and the XIIth Grade.

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<sup>2</sup> In Mizoram, factory owners have to obtain annual permits for workers from outside the State; further, striker on non-Assamese labour in Assam appear to be a manifestation of non-conducive local conditions for hiring of outside labour.

### *9.2.1.1 The School Level: An Important First Step*

At the very base of a sound strategy to develop human capital will be good quality education inputs at the school level (this has been emphasized in the Chapter on Human Development in the Education section). There is widespread evidence that education has a positive impact on labour productivity. Studies have shown that the spread of technology depends on learning potentials and motivations linked to the extent of formal schooling, with a causal link from education to economic growth. The base of employable skills will be built in schools, which apart from improving the overall education will increase the use of computers in the classroom, and greatly raise the level of maths and science teaching across all grades.

While there has been a temptation in many economies to vocationalize secondary schools, a more cautious approach is required in view of the empirical evidence that several people who studied vocational subjects eventually took jobs unrelated to their training.<sup>3</sup> Such evidence coupled with the high unit-cost of vocationalizing the curriculum (scale diseconomies), favour the more conservative policy of emphasizing general skills, with the introduction of selective vocational courses at the secondary level (to prepare the base for jobs in carpentry, electrical appliances, construction, hotelling and so on).

### *9.2.1.2 Vocational Interventions at All Levels*

Job-oriented training needs to be made available across all educational levels, including those who leave school in Grades X and XII. In fact, the school-to-work transition can be facilitated through good Vocational Education and Training (VET) programmes that equip people with tradable skills.

- An important first step would be to document and quantify the skills base of the region, and the supply of training available. This would be a vital input into the manpower planning process, as it would help identify gaps in skills and in training facilities. The demand side of the situation would also need to be assessed, and this could be best done by a regional planning agency such as NEC or one of its bodies, working in conjunction with industry associations and perhaps private consultants. Inputs would come from all agencies that might have an impact on the future labour needs of the region including Government departments (for planned infrastructure expansion, tourism facilities etc.), private industry and agencies (involved in the delivery of basic services such as schools and healthcare) and others. These will be linked with the development of sectors as proposed in this report, which are vitally dependent on the availability of certain types of skills in the region (raising non-farm employment, tourism, hospitality and so on). Private sector and potential employers are well-positioned to track technological developments in different occupations and to assess demand for specific skills and developing sector-wise skill profiles.
- Operationalizing the process of delivering appropriate vocational training courses in the region would be based on outputs from the above surveys which would help identify the

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<sup>3</sup> Given a natural preference for secure Government jobs in most NER States that is probably also the case in this region. In the absence of a placement profile of vocational schools this could not be verified.



nature of training and skill development needed to meet current and potential (near future) demand. The existing network of ITIs and polytechnics in the region need to be expanded to raise the skills base, and efforts are being made to do this. Existing courses need to be strengthened and upgraded for higher-level training; in addition, training has to be expanded to cover trades correlated to the technical skills needed by the region, in coordination with NER's new industrial policy. Training courses have to be more dynamic and incorporate training on new technologies so that graduates from these institutes can compete outside the region, and even globally. Given the lack of a modern industrial base in the region, linkages may need to be developed with industries outside NER for internships and employment.

- Private firms could help in identifying the courses needed, developing competency-based curricula and learning materials. They can also provide experts who conduct the training, as well as the space and tools on which people can be trained and help with placements.
- In some instances, private parties could very effectively work in collaboration with State Governments to train and certify people as is being done with the IT Department in Mizoram (Box 9.1).

#### **Box 9.1 Private-Public Collaboration in Job-Oriented Technical Training: IT Entrepreneurs Training Programme in Aizawl**

A major new initiative between the Government of Mizoram and private IT companies is bringing international-level training and business development to unemployed people in the State. A partnership between the IT Cell of the Government of Mizoram and New Horizons India (a US-based company) the IT Entrepreneurs Training Centre and Prometric Testing Centre was set up at Aizawl in 2005. The centre provides employment-related training and skills to young, educated unemployed people in an environment equipped with the latest IT technology. The first batch of 200 students were inducted in September 2006, for a two-year course, which includes training in software development and business communication, that will equip them to set up their own business ventures. NEC will fund training for 400 such candidates over a period of two years.

New Horizons will also set up a prometric testing centre at Aizawl to allow students to apply for certification from international companies like Microsoft, Oracle and CISCO, which will expand employment opportunities outside the State and even internationally. The Government pays the certification fees for the first attempt to encourage students to apply for certification.

The training also supports self-employment among graduates. The cell is setting up an IT Resource Centre where graduates will be given space and access to infrastructure and support to operate small IT consultancy firms or other small businesses or to apply for other jobs online, so that they need not invest in IT infrastructure.

Source: Field visit by the study team to the IT Cell, Planning and Programme Implementation Department, Government of Mizoram, Aizawl.

- A strong focus of the strategy to increase employment will be making information available both on the variety of skill development opportunities available by district, State and in NER; this should ideally be delivered on a user-friendly website (which is managed and kept up to date by NEC and where the information is perhaps even translated into regional languages). This information should also be made available in print form in schools and colleges and other venues at which young people congregate. A similar effort could be made to provide information on jobs that are available, or Government self-employment schemes. Media can play its part in spreading awareness about opportunities for skill enhancement and possible careers.
- Training institutes will need to have a strong job placement focus by developing links with private industry, or by making available information on Government schemes for setting up their own enterprises.
- Through the project on 'Providing Urban Amenities in Rural Areas' (PURA), (see Annexure 8 for details) Nagaland University will be part of programme aimed at creating world-class vocational training institutions in construction, carpentry, welding, computer maintenance and services and ITES.
- An avenue for promoting employable skills among youth is the community polytechnic, typically a wing of an existing polytechnic, which promotes rural and community development through the application of science and technology in its immediate surroundings, using the infrastructure of the polytechnic. At present 19 community polytechnics function in the region.
- This ambitious plan for upgrading the technical foundation of the people will call for a large number of trainers. A regional training institute could be set up to train and certify skilled workers to become trainers. These trainers can then set up a network of institutes with certification from the apex training institute.

### *9.2.1.3 Building Entrepreneurial Capabilities*

- The other focus of manpower planning will be to promote those skills and avenues that can help develop entrepreneurial talent in NER. For a start, vocational training institutes could include courses on small-and medium-enterprises to equip those planning to set up their own enterprises in various business-related functions including entrepreneurship development, basic finance and accounting and ICT training.
- Apart from business-related skills, training can be provided in skills that are amenable to self-employment, such as IT (see Box 9.1). Here, private companies are well equipped to provide the training and equipment for this purpose. In Assam, for example, private companies such as Punjab National Bank and Bosch Machine Tools have collaborated with the State Institute of Rural Development to train young unemployed people for the Development of Entrepreneurs in Assam (IDEA), in Kahikuchi outside Guwahati. The aim is to give those interested the skills and basic business acumen to initiate their own





businesses. Instructors train them in a variety of areas: improved design and production in handicrafts (with a focus on bamboo-based crafts), horticulture development in clusters (especially vegetable cultivation), the use of machine tools, improved technology and marketing of handlooms, management of rural micro-enterprises, improved agricultural practices, dairy and poultry farming and agro-processing.

#### *9.2.1.4 An Expansion in the Supply of Professional Education*

- There is also an expansion in the supply of professional education planned for NER. Each State now has at least one Central university, which can offer professional oriented courses along with the usual graduate-level courses. The recommendation is to set up centres of excellence in each university which will focus on the needs of the region (area studies, languages, sports training and so on), which in turn will create specialists in their fields. There are plans to set up an Indian Institute of Management (IIM) in Shillong, and there is an IIT in Guwahati. The goal will be to create a pool of professionally qualified people in the northeast capable of being employed anywhere in the country, and abroad. The focus will be on two main areas: developing skills and knowledge in globally expanding professions, or areas which focus on 'core competencies' of the people in the region.
- In the first instance, this will mean equipping young people with directly employable skills in professions that are growing worldwide, the most obvious ones being in the IT and ITES sectors, but also in nursing, the hospitality industry, airlines, and so on (see Box 9.2 for a sampling). Such institutes must be set up by private agencies, either in partnership with State Governments such as the Manipal Group of Karnataka (as Sikkim Manipal University of Health, Medical and Technological Sciences), or in collaboration with well-recognized, experienced private training providers from other States; hospitality training (ITC and Radisson), fashion design and technology (National Institute of Fashion Technology, Pearl Academy, Shrishti in Bangalore and the National Institute of Design in Ahmedabad), para-medical and nursing (Manipal, Vellore) (This list is only indicative).

#### **Box 9.2 : Focus on Some Professions**

**Nursing:** The current global shortage of nurses in developed countries such as the United States, United Kingdom and Australia is expected to increase exponentially over the next few years, especially with the 'greying' of their populations. Already these countries have a substantial number of foreign-trained nurses working in their health systems, and the shortfall is estimated to be 285,000 in the US by 2010 and 53,000 in the UK by 2011 (Aiken, 2004). Nursing training within the country is best-established in Kerala which has 200 nursing schools, mostly run by private entities. Graduates from these have been much in demand within the country and abroad, but the Kerala nursing colleges no longer have the capacity to meet this demand. With the excellent reputation of nurses from NER, there has to be a focus on expanding facilities within NER for nursing (and other allied health professionals). At present, nursing training is offered in several North Eastern States, but could be expanded to all hospitals that can support the training. Collaboration with private nursing training colleges across the country would help provide the qualified trainers needed for this expansion.



**Hospitality:** Already hotels and restaurants in the major cities in the country are increasingly being staffed by people from the Northeast, who display an innate aptitude, talent and interest for this line of work. Professional training in the hospitality industry will equip them to move up the ladder to management positions.

**Airlines:** The expansion and proliferation of private airlines in the country has led to the large-scale recruitment of personnel at all levels—management, flight attendants, ground staff, baggage handlers and so on. Increasingly, the new hires, especially in the service departments are being recruited from NER and three stewardess training institutes have already started functioning in Guwahati.

**Sports:** The emphasis on promoting sports and physical education from the school level as enunciated in the National Sports Policy, 2008, through to college and beyond will require a large pool of trainers and coaches in the country, not to mention related professions such as sports medicine and physical therapy. The innate physical and sporting abilities of people in the northeast could be channelled into this arena.

**Fashion:** This is another rapidly emerging field as products by Indian designers are increasingly in demand in the larger cities in India and abroad. Fashion, textiles and design are areas well-suited to the talents and abilities of women and men in NER, especially Mizoram and Nagaland, who have already shown an aptitude for supplying innovatively woven textiles to markets abroad and within the country.

### 9.2.2 Capitalizing on the Region's Innate Talents and Interest

- Employment opportunities are expanding, mostly outside the region for now, in areas in which people from NER have an innate talent and interest: fashion technology and product design, airlines industry, sports and physical fitness and music, or based on indigenous materials such as bamboo, silk and traditional textiles. A centre for excellence in sports with the latest equipment and facilities could be set up in the region, with the aim of training aspiring sportspeople and coaches to meet the growing demand for coaching nationally as well as in the region. A Regional Mountaineering Institute for developing mountaineering skills among local youths, would also tap into the innate abilities among young people as well as link up with the promotion of adventure tourism in the region. The formation of regional institutes such as the North East Institute of Fashion Technology and the North East Institute of Design would allow an exchange of knowledge and technology within the region, and showcase it outside.
- Well-established autonomous technical institutes from the rest of the country such as the National Institute of Fashion Technology (NIFT) and the Manipal Foundation could be encouraged to open centres in NER (This list is only indicative). Their presence will provide existing training facilities with healthy competition as well a chance to raise the quality of their instruction. Further, there is a synergy between some of the strengths and talents of the region and rising global and national demand for qualified professionals in these areas. The promotion of these professions could be the focus of professional higher education in NER.



- While English is the intended medium of instruction and assessment in several secondary and high schools, some of the graduates from schools in the region find it difficult to make the transition to study and work outside their States because of lack of practice in spoken English. One suggestion of the Sectoral Summit on Education in August 2007 was to set up regional language centres in the main cities where students could practise their English and Hindi-speaking skills. In this context, the use of interactive radio instruction and computer-aided learning would also help.

### 9.2.3 Expanding Economic Activity to Boost Employment

Expanding the base of economic activities in the region include land-based activities agriculture, horticulture, social forestry and agro-based industrialization offer ample potential in NER. The forest resources of this region can support and sustain industries if they are used according to a working plan, which most of the States have yet to develop.

Further, several States are rich in mineral resources (Assam, Arunachal Pradesh, Tripura, Nagaland and Meghalaya) but these have only been substantially exploited in Meghalaya and Assam. These resources support an urban industrial base creating opportunities for many, and in addition have spillover effects on the rural areas through ancillary activities.

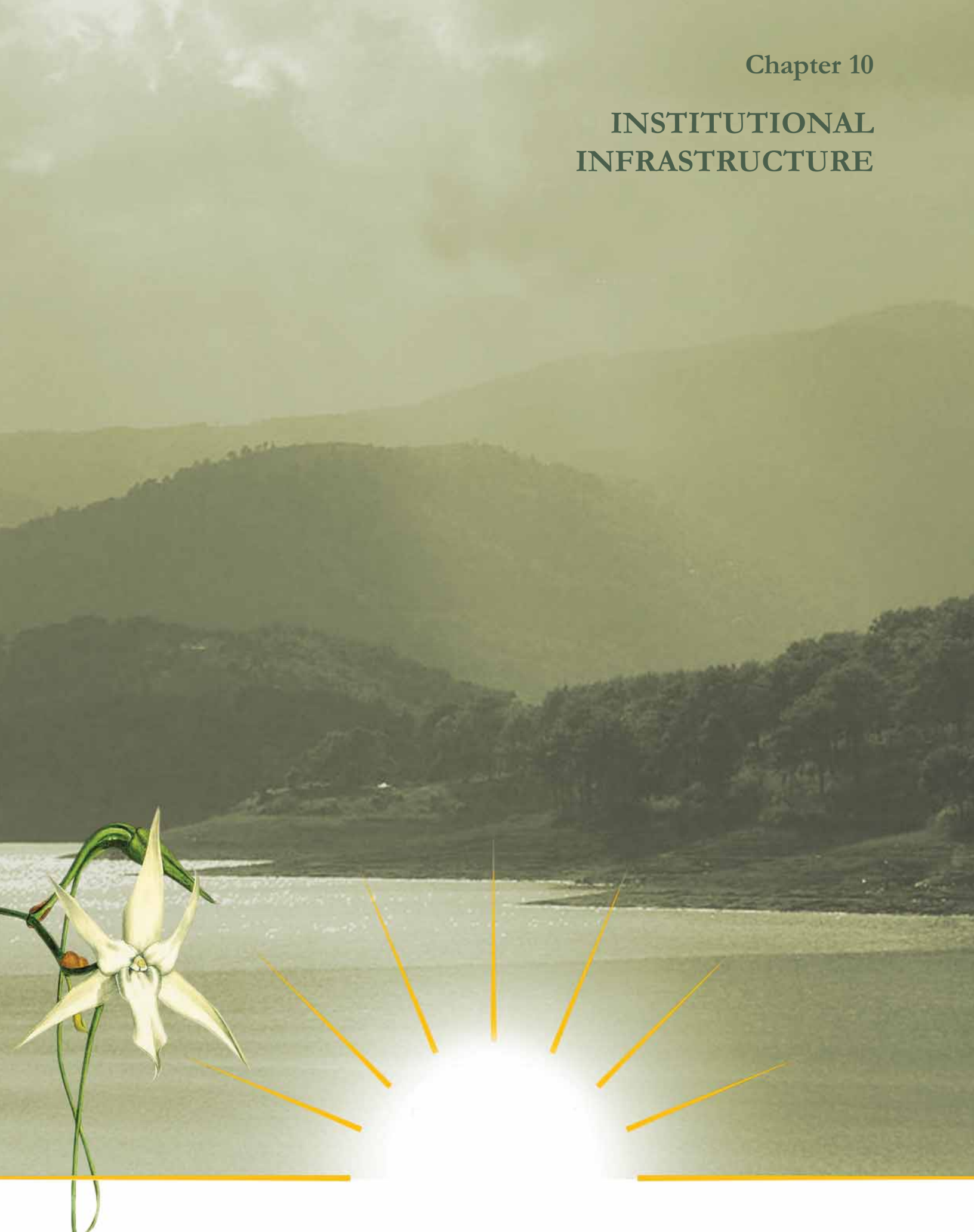
Apart from providing an enabling physical infrastructure for the expansion of activities that create jobs, Governments will also need to make available information about feasibility, accessibility, markets and finance on a wide scale. Some part of the infrastructure can be provided through public employment schemes. At the same time Governments should make efforts to create a favourable environment for private investment to supplement their efforts. Strategies to give a push to public investment in critical infrastructure and to attract private investment in industry and agriculture are discussed in the relevant chapters in this report.

The Central Government plans to go in for bamboo plantation over 6 million hectare during the next ten years under its National Mission on Bamboo Technology and Trade Development. An enabling framework is required to realize this potential.

- Integrating local markets and opening up markets in neighbouring countries by increasing connectivity would provide the much-needed thrust to employment growth. Development of labour markets would, however, require easing entry restrictions and emphasis on skill development.
- It would be prudent to focus on production based on locally available raw materials, which would add value within the region, reduce transport costs and help States exploit their comparative advantages.

Chapter 10

# INSTITUTIONAL INFRASTRUCTURE





## Chapter 10

### Institutional Infrastructure

We have argued that lasting peace and prosperity in the region requires qualitative change in the governance system to maximize self-governance and in designing and implementing grassroots planning in the planning strategy. Making a success of this strategy requires augmentation of the capacity of not only the people to effectively participate in governance and in economic activities but also of the institutions to support and promote new systems of governance and development. In general, developing capacity in institutions is fundamental to converting fragile economies into stable ones. Meeting the vision and placing NER on the path of progress to enable it to catch up with the rest of the country will require strong and capable institutions at all levels and across all activities: from local governance institutions to district and State levels and beyond at the level of NER, to community-based initiatives, to formal institutions for education and health, Non-Governmental Organizations and even the media.

#### 10.1 The Institutional Framework in the North East: A Gap in Capabilities

##### 10.1.1 Local Governance Institutions

The expanded role that local governance institutions will play in the planning process will require the development of their capacity to prepare grassroots level plans and the designing, monitoring and implementation of different programmes. Similarly, effective decentralized delivery and monitoring of services such as water, sanitation, primary health and education, to the grassroots level, will call for an increase in their abilities. There is a wide variation in types of local self-governance institutions in the region<sup>1</sup> with differing levels of capabilities to meet their responsibilities.

Many of the social sector and development programmes, including the employment guarantee programme, rural housing and water supply are based on active local community involvement in designing, monitoring and implementation. The National Rural Employment Guarantee Programme, (NREGP) for example, is structured around a system where projects providing work are determined by the Gram Panchayat, progress is monitored at the Panchayat level, including the maintenance of records of those registering for work and funds are disbursed only after the Gram Sabha certifies that the work has been satisfactorily completed.

Local bodies can play an important role as gatekeepers to public health and education initiatives by tracking outcomes such as the construction of school facilities, filling of vacancies, training of teachers and helping retain children in schools. The recently launched National Rural Health Mission (NRHM) provides for the active involvement of Panchayati Raj Institutions (PRIs)

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<sup>1</sup> Local Self-Government institutions range from Panchayati Raj Institutions in the rural areas of Assam (apart from two districts covered by the Sixth Schedule), Arunachal Pradesh, Manipur and Sikkim to the autonomous district councils in most of the remaining areas which are under the Sixth Schedule of the Constitution, apart from Nagaland and parts of Manipur, with their own local institutions.





in managing, administering and being accountable for health services at the community level. Supervision of health sub-centres will improve attendance of staff, motivate appropriate quality of care and provide constant feedback on patient satisfaction.

### 10.1.2 Government Agencies and Departments

Even though the vision for peace and prosperity in the northeast is based on participatory development from the grassroots up, the role of Government agencies is crucial to the process. The shifting role of Government agencies from providing goods, services and jobs to creating an enabling environment for the development of productive economic activities, helping develop sectors with potential such as tourism and horticulture (detailed in the chapters on industry, services and rural development), focusing on appropriate infrastructure creation and a larger regulatory and monitoring role will call for the development of new skills and capacities at all levels.

Many public programmes are still implemented by the State, and the successful delivery of these schemes to the people depends on the quality of functioning of the bureaucracy and administration. Many States have not been able to take full advantage of the schemes available for them—they lack the managerial capacity to handle funds or prepare and monitor need-based projects. Often public administration is poor because of weak accountability mechanisms, an indifferent staff and lethargic leadership. A study is being convened to identify gaps in the skills of Government functionaries at all levels; this would entail building of a battery of trainers from among Government employees as well as the NGOs. An elaborate programme for upgrading the State Institutes of Public Administration should be taken up by DONER in collaboration with DoPT.

The capacity of Government officials in the region to prepare projects and implement programmes and schemes remains low, and this leads to delays in submission and cost escalations. DPRs prepared by State Governments are often not in conformity with the technical norms of the line ministries, and it sometimes takes many revisions before they are acceptable. For example, a major problem identified by the Ministry of DONER in the implementation of NLCPR-funded projects was that poorly prepared DPRs led to delays in submission and cost escalation in projects.<sup>2</sup>

Though in the initial years, the Government will have to play an important role in production, distribution and promotion, with the passage of time, the role of the public sector will shift to less direct participation in actual production and distribution, but a greater role in promotion, monitoring and regulation. The implication of devolution of service delivery to Panchayats and Village Councils, will mean a sharp increase in the number of agencies (contractors and sub-contractors), in the delivery of services and goods. This has made the task of overseeing the system far more complex, and calls for greater technical skills among Government departments and different types of regulations.

### 10.1.3 Other Elements in the Institutional Framework

**Self-Help Groups:** The Self-Help Group (SHG) movement was initially slow to take roots in the northeast, but in recent years the growth in the number of SHGs in the region has been among the highest in the country. These SHGs have been instrumental in expanding

<sup>2</sup> Identified by the Ministry of DONER.



Convention Centre, Agartala

employment opportunities (such as the manufacture of fish feed, small-scale agro-processing and poultry keeping) and income, especially among poor rural people.

**NGOs and Community-Based Organizations:** NGOs and religious organizations are doing excellent work with local people in several health-related interventions such as improving maternal and child health in the *chars* areas of Assam, or addressing the proliferation of HIV/AIDS in States like Mizoram and Nagaland.

## 10.2 The Way Forward

### 10.2.1 Local Governance Institutions

Effective grassroots level participation in planning and service delivery will require building the capability of Panchayats encompassing training, provision of adequate functionaries, technical assistance and other support to them.

Recognizing that the vast expansion in their tasks will need substantial expansion in their capacities, the National Capability Building Framework (NCBF)<sup>3</sup> was formulated by the ministry of Panchayati Raj and relates to training and capacity building of Panchayat elected representatives and others. The framework covers every stakeholder in Panchayati Raj, especially elected representatives and officials, who would be enabled to upgrade their knowledge and skills to better perform their responsibilities in programme implementation and service delivery, and equips them with skills required for day-to-day performance of executive duties. Training is treated as a continuous and sustained process aimed at long-term transformation and development (see Table 10.1A in annexure 10.1 for a detailed list of training under the Framework).

<sup>3</sup> NCBF is based on the action points of the Seventh Round Table of State Ministers of Panchayati Raj held at Jaipur in December 2004



One way to ensure that PRIs function well as institutions of self-government is to provide them with physical infrastructure, administrative staff support and training to enable their members to discharge their duties effectively. The ministry of Panchayati Raj has formulated a comprehensive programme called Gram Swaraj to help States in assuring necessary physical infrastructure, administrative staff support and capacity building and training to enable Panchayats to effectively perform their duties as institutions of self-government.

**The Planning Process:** The development of village-level plans by the Gram Panchayat and municipal plans in the urban areas relies on active participation of the people. The success of this approach in turn depends in the first instance on the extent to which local-level bodies are empowered and functions and funds are devolved to them. Progress on this has been varied across the region.

Building development plans from the grassroots will require significant capacity building at the third tier of Government, to ensure that plans evolved at the ground level are technically viable and effectively coordinated with plans at the higher levels. The involvement of NGOs in helping PRIs in this process has been very effective in many cases and they should be encouraged. The Approach Paper to the Eleventh Plan recommends that a small portion (say 1 per cent) of the budget provision for CSS be earmarked for the development of capacity to support District Planning Committees (DPCs).

**Service Delivery:** A fundamental step for ensuring that local-level bodies become effective in service deliveries is to develop their capacities in the widest sense of the term. In addition, clearly demarcated roles will need to be assigned to Panchayats through activity mapping. The benchmarking of services will ensure that local bodies can be clearly judged in terms of outcomes.

**Accountability** systems also need to be set up so that citizens, the ultimate recipients of services from Panchayats, can hold them to account for inadequate service delivery. Important tools for accountability include the Right to Information Act, 2005, as it allows stakeholders, especially beneficiaries from the system, to obtain information necessary to enforce accountability. IT is also a powerful tool which enables beneficiaries to enforce their rights. The setting up of CSCs in rural areas will mean that the Internet will soon be accessible in villages. For example, a website monitoring the progress of Bharat Nirman will now have the list of villages electrified under RGGVY, the list of villages where drinking water has been provided, or those villages with all-weather roads.

### *10.2.1.1 Areas under the Sixth Schedule*

In the areas in the northeast covered by the Sixth Schedule, the exercise of powers across district councils varies greatly, and capacity building in this context would firstly involve a standardization of these powers.<sup>4</sup> Further, village councils that do exist are merely involved in the dispensation of justice rather than as institutions of planning and service delivery. Even the devolution of functions to these bodies varies widely across the region: State Governments and Autonomous District Councils (ADCs) have been very slow in transferring agreed departments to the councils, and run parallel machineries even in vital areas such as rural development, education and health.

<sup>4</sup>A more detailed discussion is available in Chapter 2 of this report.

Very few Autonomous District Councils (ADCs) have access to planning professionals, and this lack of specialization has led to short-term thinking on development and ad-hoc conceiving of development projects without proper technical and financial considerations. Planning processes will have to be instituted and professionalized for more effective implementation. At the district council level, professionals and experts in planning, monitoring and evaluation agencies will need to be inducted into the structure of the council's administration. As mentioned above in the case of PRIs, good project design is also important for accelerated and time-bound development. Capabilities for preparing project documents will need to be improved, which should be addressed when improving capability for planning.

### *10.2.1.2 Communitization*

Nagaland which is neither under the Sixth Schedule or Parts IX and IXA of the Constitution has its own traditional system of village bodies. Recent experiments with communitization at the village level to harmonize the 'village community body' with the traditional village body have been successful so far. However, despite the achievements of the communitization process in many areas in Nagaland, strengthening and supporting the institutions delivering these services would increase their effectiveness. At the very start, training of Village Council (VC) members will improve their competency and functioning in the areas of service delivery and planning for their units, and the Nagaland Government has formulated an elaborate training and capacity building exercise for these members.

Further, closer partnerships between Village Councils and Government agencies would improve the quality of services. For example, the efforts of Village Education Councils (VECs) to improve schooling for children would be boosted by simultaneous Government efforts to improve the quality and supply of teacher training, teaching materials and infrastructure. A major bottleneck faced in the communitization of education has been a lack of support from Government functionaries. District-level education functionaries still need to adjust to their new roles as partners and not providers of services. To achieve this, greater collaboration among VECs, the beneficiaries and Government functionaries involved is required. The competence of supervisory officers will also be needed to strengthen the Government-community partnership that is crucial to the process of communitization.

Communitization, too, will benefit from well-developed channels of evaluation, monitoring and feedback to improve the quality of services. Capacities need to be built among people to create informed and vigilant communities who can act as pressure groups to ensure that their wards are provided with adequate physical, social and academic services. Sustaining the process through enhanced community involvement is thus vital, and this can be done through mass awareness, a responsibility which should be shared by Village Councils and Government functionaries. A degree of independent monitoring could be provided by a senior district official regularly visiting communitized schools to see how problem areas are being dealt with. Further, a special cell could be set up within the official machinery to monitor the communitization programme and address issues as they arise.





## 10.2.2 Government institutions for responsive governance and service delivery

At a fundamental level, good coordination across the various directorates in the same department, (in health, for example, this would cover public health, family welfare and medical services) leads to better outcomes as they work in synergy with each other without wasting effort. Continuous monitoring and review are also important. The self-employment programmes implemented by different ministries need to be integrated into a single programme that cuts across ministries. The programme should also provide for training and capacity building of educated unemployed youth, particularly in rural areas, as such unemployment has assumed serious proportions in the region.

Apart from enhancing their information-based capacity, Government departments and agencies need to enhance their capacity to respond to people's demands for better services and to improve their accountability.

The capacity of Government officials in the region to prepare projects and implement programmes and schemes needs to be built by various ministries through the capacity building components of their programmes and schemes. Efforts are being made by the Ministry for capacity building of State Government officials through various training courses.

### 10.2.2.1 *Providing support services*

In building a base of knowledge and skills among people, Government agencies and departments can provide practical and active support to help people in different professions:

- Agricultural extension wings in all States need to be trained to reach farmers and emphasize modern scientific methods of agriculture, especially in cash crops. This is being done in the case of floriculture, where through the Horticulture Mission, trained officials guide new growers of anthuriums and other exotic flowers on the technical aspects of successful cultivation in Mizoram and other States.
- Impart training to artisans and craftspeople in design, new technologies, materials and so on to help them produce marketable crafts and artefacts. Marketing support will have to be provided to SHGs to ensure their sustainability. In Assam, through the State Institute of Rural Development, weavers are being trained outside Guwahati in new weaving technologies, and dyeing processes, to raise the quality of their output and improving their earning capacities.
- Spread awareness among youth (this could involve setting up a website with current information) about training and employment (and self-employment) opportunities for school or college dropouts; provide or facilitate appropriate rural-based training related to crafts, agro-processing etc.
- The capacities of Government agencies and research institutes themselves need to be developed to deal with these tasks. The network of research institutes in the region such as



the Assam Agricultural University in Jorhat, the Central Agricultural University in Manipur, Indian Council for Agricultural Research (ICAR) and the Central Institute of English and Foreign Languages in Shillong will need to be well-equipped in terms of facilities and faculty to conduct region-specific research that will supplement efforts to fuel development in areas crucial to the northeast. For example, the vast emphasis on raising the quality of education in the country across levels will require that institutions like SCERT and DIETs are strengthened to provide the inputs required to teachers in the form of training and materials. The staff of these institutes will be given the orientation and training needed to equip them for this, along with exposure visits to other parts of the country to enable them to understand the extent of the contribution that they can make to the universal education effort.


### 10.2.3 The North East Council (NEC) and Other Institutions

NEC has an important role to play in promoting progress and prosperity in the region, by dint of its unique role as a regional planning body. By working closely with State Governments it could help coordinate State-specific plans for region-wide benefits, as well as preparing investment plans relating to infrastructure and services which have inter-State spillovers within the region. At the start it can maintain regularly updated socio-economic database banks for the use of all member States as a tool for developmental planning for the region. It could also commission a GIS resource map for the entire region. It could also be an invaluable resource in building capacity among officials, especially in technical fields such as road building where it could help conduct capacity building and training programmes on procedures followed by different ministries such as the ministry of transport.

To take its place at the centre of regional planning in the northeast, however, NEC would need to build its capacity to the greatest extent. This will mean at the very outset it's the professionalization, so that it is staffed with professionals, with departments run by people who are thoroughly familiar with the subjects they deal with. Thus, the head of the health department should be well-versed in the issues, constraints and needs of different parts of the region to be able to bring about the most appropriate interventions that will significantly impact on health outcomes. Further, good inter-departmental coordination within the NEC will ensure that planning and policies are based on holistic considerations and do not take place independent of initiatives in other areas. NEC departments also need to work closely with State Government departments to ensure that planning efforts at the state level are coordinated with their own proposals.

The North East Handicrafts and Handlooms Development Corporation (NEHHDC) and the North East Regional Agriculture Marketing Corporation (NERAMAC) have been incurring losses, and there are various initiatives and recommendations to facilitate their taking a central role in the regional development process. In both cases, their roles have been confined to a small part of the region; an expansion in their activities to cover the entire region would make them more effective. These two agencies, along with NEDFI, can play an important role in promoting trade and industry, by becoming more proactive in providing professional guidance and support to entrepreneurs. They could also develop synergies with other related institutions to eliminate overlaps and duplications.





NERAMAC should shift from its production activities and confine itself to procurement and marketing activities. For better management and outcomes, NEREMAC and NEHHDC need to have some private sector inputs, especially as the role of NEHHDC has become largely redundant as each state in the region (except Arunachal) has its own Handloom and Handicraft Corporation. In fact, the Task Force on Connectivity and Promotion of Trade and Investment in North-East States has recommended that these three agencies can be rejuvenated during the Eleventh Plan through an infusion of funds and a transfer to joint venture, with a majority holding (84 per cent) by private agencies and outcomes (Planning Commission, 2006).

#### **10.2.4 Other agencies: Self-help groups, civil societies and the media self-help groups**

An effective SHG movement, to a large extent, relies on the interest and awareness of the NGOs embedded in the region. Given the diversity of the region, local organizations of all types can be effective promoters of SHGs, making rural beneficiaries aware of the functioning of SHGs and SHG-bank linkages.

To give an impetus to the SHG movement, especially in States where it has been slow to take hold, will require better coordination among the various agents that operationalize the programme: DRDA, different Government agencies involved, banks and community-based organizations. Some of these may need capacity building to make them more effective in spreading information about SHGs and how their linkages with banks work and in helping the groups develop their own skills in managing enterprises.

##### ***10.2.4.1 Non-governmental organizations and civil society***

The role of civil society needs to be highlighted, well-defined and dovetailed into the overall public health policy framework so that they work in consonance with the Government Departments. Given their reach into the more remote areas, and their rapport with local people, their efforts could be intensified and expanded, for which the capacities of several of them needs to be developed, their skills base expanded, and in some cases, given some funding.

Because these agencies often work closely with people in areas where other agencies have little reach, they can play an important role in sensitizing and raising consciousness among the people living there. They can articulate demands for improved public services and serve as watchdogs for public-sector performance, as well as insisting on transparency and accountability on outcomes and the use of funds.

Another important role is promoting grassroots participation in governance: apart from helping to build people's awareness of the functioning of local governance bodies, they can play a lead role in the capacity building of these bodies through training, exchange programmes, building networks and sharing information. They can assist District Planning Committees and local-level bodies undertaking village planning, resource mapping and identification of development schemes. By educating people on how to hold the grassroots bodies to account they can improve their

functioning. They can also help in the independent monitoring of schemes and programmes to increase their effectiveness.

## 10.2.5 The Media

The media is a particularly important agent of change. It can focus attention on service delivery failures and sensitize people to local problems and ways to deal with these. It can play an important role in demanding accountability for service delivery performance from Government officials and Departments.

### 10.2.6 Information and communication technology (ICT)

ICT is a vital input in capacity building for local governance organizations, particularly for transparency, disclosure of information to citizens and social audit, monitoring to improve the quality of service delivery, improving internal management and efficiency, capacity building of representatives and officials of the Panchayats, and e-procurement. It will help build information systems for planning, compilation and coordination at various levels of local Government.

E-governance is in the initial stages of implementation, but it is proving to be useful in improving the delivery of public services to people in other parts of the country (see Box 10.1).

ICT will play an invaluable role in building capacity among local-level bodies such as Panchayats, ULBs and Village Councils, especially for building capacity among representatives and officials of the Panchayats.

The Expert Group on Planning at the Grassroots Level (chaired by Mr. V. Ramachandran) recommended that these objectives would be realized if the following steps were taken:

- (a) Development of appropriate software for Panchayat activities and maintenance of a repository of software including source codes, which can be used by all Panchayats for their activities.
- (b) Capacity building of elected Panchayat representatives and officials to make meaningful use of IT tools.
- (c) Building a vibrant net-community of Panchayats using NPP, through which they can network with each other as also with other entities engaged with them.
- (d) Content management for back-end and for respective Panchayat portals as a part of the National Panchayat Portal.
- (e) Undertaking process re-engineering in consonance with activity mapping for functions transferred to Panchayats, so as to put in place IT-enabled planning, decision-making, implementation, service delivery, reporting and public disclosure including information dissemination under the National Right to Information Act or State Right to Information Acts.



- (f) Strengthening the National Panchayat Portal to provide a single-window entry to information and services provided by Panchayats. (Ministry of Panchayati Raj, 2006).

**Box 10.1: Using IT to Expand Capacity in Public Services: The E-Seva Project in Andhra Pradesh**

The E-Seva Project has greatly expanded the capacity of Government Departments and Agencies, while providing people with greatly improved services (in selected areas) and information about departments and agencies of the Central and State Government through a chain of computerized Integrated Citizen Service Centres (ICSC) now called E-Seva centres. Andhra Pradesh has 43 E-Seva centres spread across Hyderabad and Secunderabad. Each centre has 8-10 counters operated by private contract staff, and the computer can process multiple types of transactions by accessing a central web server, which in turn communicates with departmental servers. Departments access and update their databases when a transaction is performed at an E-Seva counter.

Services accessed include payment of utility bills, reservation of train tickets, municipal services such as getting birth and death certificates, vehicle permits and driving licences, passport applications and telephone connections. Using IT in the delivery of services modularizes tasks, making it possible to outsource them to the private sector and greatly improves the quality of service delivery.

Apart from reducing the pressure on Government Departments and greater timeliness of payment of dues, this frees up Government Departments to do other tasks that only they can handle. By outsourcing the distribution of applications, the passport department has effectively multiplied its number of receiving counters several fold. Further, by connecting the computerized ends of several departments with the service centres, IT has been effectively able to 'glue together' separate departments without making too many changes in their organization.

Source: Subhash Bhatnagar (2006) 'Andhra Pradesh's E-Seva Model.'

Chapter 11

**PUBLIC FINANCES**







## Chapter 11

### Public Finances

The vision of achieving peace and prosperity in the region requires significant investments in its social and physical infrastructure. Indeed, much of the investment needed to generate incomes to catch up with the rest of the country by 2020 would have to be made by the private sector and this will be possible only when a proper investment climate is created. An important precondition for the creation of a conducive investment climate is a quantum jump in investments in infrastructure facilities by the Central and State Governments. This chapter analyses public finances of the NER States to estimate the resource availability for investments in social and physical infrastructure.

An analysis of public finances of the States in the region is necessary to understand the volume of resources committed by them to providing basic public services and the ways and means of augmenting the fiscal space either by raising more resources through tax and non-tax revenues or by reprioritizing to commit resources to strengthening infrastructure. This review of the finances of the State Governments in the region is with the view to assessing their contribution to strengthening the infrastructure in the region.

#### 11.1 Sources of Financing

Fiscal space for making investments in physical and social infrastructure depends on the generation of revenue and the committed expenditure for administration, interest payments and calamity relief. A significant proportion of the expenditure on social services falls within the revenue account and so also the expenditure on maintenance of physical infrastructure. Capital expenditure on physical infrastructure depends on the surplus generated in the revenue account and the volume of borrowing. The latter comprises of market borrowing, which is determined by the Central Government (in consultation with the Reserve Bank of India), the share of small savings collections and Central Government loans to the States. The practice of Central Government directly lending to the States has been discontinued since 2005-06. In addition to these, the State Government borrows indirectly through special purpose vehicles (public enterprises) from the Housing and Urban Development Corporation (HUDCO), Life Insurance Corporation (LIC), NABARD and similar other institutions.

In the case of the North Eastern states, each Central Government Department is required to earmark 10 per cent of its plan budget for the region and the unspent balance of it, if any, is credited to the non-lapsable fund. This fund is used for infrastructure development in the North East States through the Ministry of DoNER. It is supplemented by a separate budgetary provision for NEC for development projects/ schemes in NER. In addition, there is direct spending by the Central Government departments including those from the Border Roads Organization.

#### 11.1.2 Budgetary Contribution

The budgetary receipts of the States comprise of tax and non-tax revenues within the revenue account and borrowings which are placed in the capital account. Revenue receipts comprise



of own tax and non-tax revenues and Central transfers in the form of share in Central taxes, statutory grants recommended by the Finance Commission, Central assistance for State plans given by the Planning Commission and grants given for Central sector and Centrally sponsored schemes by various Central ministries.

In the NER States, aggregate receipts as a ratio to GSDP was 31.68 per cent in 1995-96 which improved to 35.81 per cent in 2005-06 (Table 11.1). Out of this, revenue receipts were 28.40 per cent in 1995-96 and they accounted 30.98 per cent in 2005-06 and capital receipts were 4.28 per cent in 1995-96 and they increased to 4.82 per cent in 2005-06. However, inter-State variations do exist among the States in the region (Table 11.1A in Annexure 11.1). The aggregate receipts were as high as 89.21 per cent in Arunachal Pradesh and as low as 28.86 per cent in Assam in 2005-06. Revenue receipts were 68.82 per cent in Arunachal Pradesh and it was 28.94 per cent in Tripura.

**Table 11.1: Aggregate Budgetary Receipts in NER as a ratio to GSDP**

(Per cent)

Receipt Head	1995-96	1997-98	1999-00	2001-02	2003-04	2005-06	2006-07 (RE)
<b>Aggregate Receipts (I+II)</b>	<b>31.68</b>	<b>31.60</b>	<b>32.35</b>	<b>31.28</b>	<b>34.66</b>	<b>35.81</b>	<b>38.92</b>
<b>I Revenue receipts*</b>	<b>28.40</b>	<b>26.92</b>	<b>25.53</b>	<b>24.88</b>	<b>28.83</b>	<b>30.98</b>	<b>35.11</b>
<b>A Own receipts (a+b)</b>	<b>5.34</b>	<b>4.95</b>	<b>5.23</b>	<b>5.35</b>	<b>6.42</b>	<b>8.88</b>	<b>8.68</b>
(a) Own tax revenue	3.03	3.15	3.38	3.63	4.05	5.06	4.98
(b) Own non/tax revenue	2.31	1.81	1.85	1.83	2.38	2.80	2.81
<b>Transfers (c+d)</b>	<b>22.06</b>	<b>21.98</b>	<b>20.30</b>	<b>19.52</b>	<b>21.31</b>	<b>23.22</b>	<b>28.44</b>
(c) Share in Central taxes	6.56	9.46	8.52	4.42	5.32	6.02	6.36
(d) Grants from the centre	15.50	12.51	11.88	15.10	15.99	18.20	21.08
<b>II Capital Receipts (e+f+g)</b>	<b>4.28</b>	<b>4.68</b>	<b>6.82</b>	<b>6.40</b>	<b>6.93</b>	<b>4.82</b>	<b>3.81</b>
(e) Internal debts Loans and advances from the	1.30	1.38	2.48	2.46	3.85	8.84	3.52
(f) centre	2.88	3.23	4.22	3.82	2.95	-4.23	0.29
(g) Recoveries of loans etc.	0.10	0.08	0.12	0.13	0.14	0.11	0.10

Source: Computation for fiscal analysis has been made by using data from Finance Accounts of all the States for each year. For 2006-08 (Revised Estimates), data from Budget Papers have been culled out. For Arunachal Pradesh and Tripura figures for their (Budget Estimates) have been used.

Note: \* It is negative due to massive adjustment in Assam for this year.

Contribution of revenue receipts in aggregate budgetary receipts was 86.48 per cent in 1995-96 and in 2005-06 it was 86.88 per cent (Table 11.2). In 2005-06, it was higher in Manipur (91.68 per cent) and Tripura (95.31 per cent), but it was lower in Arunachal Pradesh (88.03 per cent) (Table 11.2A in Annexure 11.2.)

### 11.1.2.1 States' Own Revenues

Fiscal autonomy and fiscal space for increasing development expenditure requires that the States in the region should mobilize revenue from the tax handles assigned to them. However, the analysis of tax-GSDP ratios of the States in the region shows that resource mobilization efforts of

the States in the region leave much to be desired. The tax revenue relative to their GSDP in the region is much lower than the all-State average. The Twelfth Finance Commission which made a detailed analysis showed that while the all-States' tax-NSDP ratio averaged 6.54 per cent for 1999-2002, it was as low as 0.89 per cent in Mizoram, 1.14 per cent in Manipur, 1.18 per cent in Nagaland, 1.21 per cent in Arunachal Pradesh, 2.12 per cent in Tripura, 3.25 per cent in Meghalaya, 4 per cent in Sikkim and 4.29 per cent in Assam. The average tax-GSDP ratio for the States in the region in 1995-96 was as low as 3.03 per cent which improved slightly in 2001-02 to 3.63 per cent. However, the introduction of VAT in the States in the region has helped to increase the tax-GSDP ratio to 5.06 per cent. Nevertheless, the tax ratio in the region has remained significantly lower than the all-States' average. Thus, in 2006-08 (RE), the average tax-GSDP ratio in the region was 5 per cent as compared to the all-States' average tax-GSDP ratio of over 8 per cent. It is important that all the States in the region should make concerted efforts to increase revenues from the taxes assigned to them.

**Table 11.2: Composition of Budgetary Receipts of NER**

(As per cent of aggregate total)

Receipt Head	1995-96	1998-98	1999-00	2001-02	2003-04	2005-06	2006-08 (RE)
<b>I Revenue receipts*</b>	<b>86.48</b>	<b>85.19</b>	<b>88.93</b>	<b>89.53</b>	<b>80.01</b>	<b>86.88</b>	<b>86.48</b>
<b>A Own receipts (a+b)</b>	<b>16.85</b>	<b>15.68</b>	<b>16.18</b>	<b>18.12</b>	<b>18.53</b>	<b>21.85</b>	<b>16.85</b>
(a) Own tax revenue	9.56	9.96	10.44	11.60	11.68	14.18	9.56
(b) Own non/tax revenue	8.30	5.82	5.83	5.52	6.85	8.58	8.30
<b>Transfers (c+d)</b>	<b>69.62</b>	<b>69.51</b>	<b>62.86</b>	<b>62.41</b>	<b>61.48</b>	<b>65.02</b>	<b>69.62</b>
(c) Share in Central taxes	20.80	29.92	26.34	14.14	15.35	16.85	20.80
(d) Grants from the centre	48.92	39.59	36.41	48.28	46.14	48.16	48.92
<b>II Capital Receipts (e+f+g)</b>	<b>13.52</b>	<b>14.81</b>	<b>21.08</b>	<b>20.48</b>	<b>19.99</b>	<b>13.23</b>	<b>13.52</b>
(e) Internal debts Loans and advances	4.10	4.36	8.68	8.85	11.10	24.88	4.10
(f) from the centre	9.10	10.21	13.04	12.21	8.50	-11.84	9.10
(g) Recoveries of loans etc.	0.32	0.24	0.36	0.41	0.39	0.31	0.32

Detailed analysis of States' own revenue shows that their contribution in total revenue has been small, although it has shown an increasing trend from 16.82 per cent in 1995-96 to 21.85 per cent in 2005-06. However, there is considerable variation in the own revenue contributions among different States in the region (Table 11.2A in Annexure 11.1). The highest contribution of own revenues in the total in 2005-06 was the highest in Assam (34.04 per cent) and the lowest in Manipur (6.5 per cent). The contribution of own revenues in Arunachal Pradesh, Manipur, Mizoram, Nagaland and Tripura was less than 15 per cent. Thus, by and large, the States in the region overwhelmingly depend on Central transfers for meeting their developmental expenditure and contributions from their own sources are not significant.

The performance of the States in the region in mobilizing non-tax revenues too is not impressive. In earlier years, the States in the region used to mobilize revenues from logging and



other forest produces or from royalty from mineral products (as in Assam). The Supreme Court judgment restricting the felling of trees has significantly eroded this source of revenue. The royalty payments on minerals essentially depend upon the decisions of the Central Government. Some States like Nagaland and Sikkim collect revenues from lotteries. Nevertheless, by and large, non-tax revenue is not a stable and dependable source. The States in the region have not been able to collect user charges on the public services provided to any appreciable extent. More importantly, the performances of their public enterprises have continued to drain the resources of the State Governments in the region. Non-tax revenue relative to GSDP was 2.31 per cent in 1995-96 which after passing through a phase of dips increased to 2.80 per cent in 2005-06. The inter-State comparison shows that it was high in Arunachal Pradesh (8.52 per cent) and Sikkim (6.61 per cent) and the least in Tripura (0.61 per cent) and Nagaland (1.30 per cent) in 2005-06.

### *11.1.2.2 Central Transfers*

Transfers from the centre are the major source of finance for governmental activities in the region. They flow from various sources: First, the awards of the Union Finance Commissions (statutory transfers) determine each State's share in Central taxes and grants to support specified functions for non-plan current expenditure. In addition, other (non-statutory) transfers flow through the Planning Commission as grants and loans for various projects. In addition, States could receive grants from different Central ministries for various schemes. The region benefits from the Non-Lapsable Central Pool of Resources (NLCPR) under which all the specified union ministries have to spend at least 10 per cent of their Plan budget in NER. The unspent balance from this 10 per cent is transferred to the NLCPR (for details see Annexure 11.2). Funds in NLCPR are used to finance infrastructure projects in NER. The ministry of DoNER sanctions these infrastructure development projects and monitors their progress.

Total Central transfers as a ratio to GSDP were 22.06 per cent in 1995-96. Of this, the share of Central taxes was 6.56 per cent and 15.50 per cent accounted for total grants. In 2005-06, total transfers as a ratio to GSDP were 23.22 per cent, of which the share of Central taxes were 6.02 per cent and grants were 18.20 per cent (Table 11.1). Inter-State variations are given in Tables 11.1A in Annexure 11.1. Total transfers relative to GSDP were much higher in Arunachal Pradesh (58.90 per cent), Mizoram (46.13 per cent), Sikkim (46.96 per cent) and Manipur (43.89 per cent), whereas in Assam they were as low as 15.40 per cent followed by Meghalaya (22.94 per cent) and Tripura (25.50 per cent) in 2005-06. Share of Central taxes to GSDP ratio was high in Arunachal Pradesh (10.11 per cent) and it was the lowest in Nagaland (3.38 per cent) in 2005-06. Total grants to GSDP ratio were the highest in Arunachal Pradesh (48.88 per cent) and the least (9 per cent) in Assam in 2005-06.

As already mentioned, the States in the region depend overwhelmingly on external receipts and they constituted 69.62 per cent in 1995-96 and came down to 65.02 per cent of total receipts in 2005-06 (Table 11.2). Out of this, funds from of Central taxes were 20.80 per cent in 1995-96 which came down to 16.85 per cent in 2005-06. The grants from the centre for various schemes were 48.92 per cent in 1995-96 and in 2005-06 they contributed 48.16 per cent in aggregate budgetary receipts of NER.



### 11.1.2.3 Capital Receipts

Capital receipts mainly come through loans from the centre for various purposes, raised internally from various sources and a bit of recovery of loans and advances. These receipts are supposed to be utilized primarily for investment purposes. The trend of this source as a ratio to GSDP shows that in 1995-96 total capital receipts in NER were 4.28 per cent, of which 1.30 per cent was internal debts and loans from the centre were 2.88 per cent. In 2005-06, these ratios were 4.82 per cent, 8.84 per cent and -4.23 per cent respectively (Table 11.1). Table 11.1A in Annexure 11.1 presents inter-State variations of the extent and trend of capital receipts. Total capital transfers as a ratio to GSDP were highest in Arunachal Pradesh (20.49 per cent) and this ratio was 1.42 per cent in Tripura in 2005-06. Internal debts were more than 10 per cent in Arunachal Pradesh and Assam and as low as 1.30 per cent in Tripura. The ratio of loans from the centre as a ratio to GSDP was the highest in Arunachal Pradesh (8.55 per cent) and was less than 0.5 per cent in Manipur, Meghalaya, Mizoram and Tripura.

As per their contributions in aggregate budgetary receipts, capital receipts constituted 13.52 per cent in 1995-96 of which internal debts were 4.10 per cent and total Central loans were 9.10 per cent (Table 11.2). In 2005-06, these contributions were 13.23 per cent, 24.88 per cent and -11.84<sup>1</sup> per cent respectively for these components. These contributions have wide variations among constituting States in the region. In 2005-06, the lowest contribution of total capital receipts was 22.98 per cent in Arunachal Pradesh and lowest of 4.69 per cent in Tripura, Internal debts were highest in Assam (40.84 per cent) and least in Tripura (4.29 Per cent) In Arunachal, the Central loans contributed to the extent of 8.48 per cent while these were only 0.19 per cent in Manipur.

### 11.1.3 Expenditure Commitments

The analysis of public expenditures incurred by the States in 2005-06 shows that the share of capital expenditure has increased over time. In 1995-96, the share of revenue expenditure was 81.09 per cent and that of capital expenditure was 18.91 per cent. In 2005-06, revenue expenditure was 83.66 per cent of total expenditure and capital expenditure was 16.34 per cent (Table 11.3). Among the States this composition varied as may be noticed in Table 11.3A in Annexure 11.1. In 2005-06, capital expenditure was high in Sikkim with 28.95 per cent and was as low as 9.34 per cent in Assam. Further, about one-third of the total expenditure was incurred under non-developmental heads and the rest two-third was on developmental heads in 2005-06 (Table 11.3). Table 11.3A in Annexure 11.1 shows that in Arunachal Pradesh and Sikkim the ratios of non-developmental and developmental expenditure were almost a quarter and three quarters respectively in 2005-06. Within the revenue account, more than 39 per cent was for non-developmental activities and the remaining 61 per cent was for developmental activities. On capital account, developmental expenditures accounted for 91 per cent. Education and health are the important two sectors under developmental expenditures.

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<sup>1</sup>There were massive adjustments in central loans in Assam, which disturbed the ratios.



**Table 11.3: Composition of Expenditure of NER**

Expenditure Head	1995-96	1997-98	1999-00	2001-02	2003-04	2005-06	2007-08 (RE)
<b>As per cent to total expenditure</b>							
1 Revenue expenditure	81.09	83.13	84.54	85.55	82.30	83.66	80.20
2 Capital expenditure	18.91	16.88	15.46	24.45	18.80	16.34	19.80
<b>I Total expenditure (A+B)</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>
A Non-developmental	29.19	31.42	35.25	36.53	36.42	34.25	32.26
B Developmental (1+2)	80.81	68.58	64.85	63.48	63.58	65.85	68.84
1 Social services, of which	35.24	36.34	36.28	35.33	34.41	32.86	33.30
a. Education, sports, art and culture	19.48	20.31	21.14	20.62	19.98	18.65	16.91
b. Medical and public health	5.46	5.49	5.23	4.98	4.38	4.01	5.51
2 Economic services	35.58	32.24	28.48	28.15	29.18	32.85	34.43
<b>II Revenue expenditure (C+D)</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>
C Non/developmental, of which*	33.44	36.31	40.03	41.14	41.19	39.18	38.09
a. Interest payments	11.29	12.83	13.58	14.18	15.12	16.28	12.68
D Developmental (1+2)	66.56	63.69	59.98	58.86	58.81	60.82	61.90
1 Social services, of which	38.83	38.60	38.18	36.66	35.60	35.14	36.03
a. Education, sports, art and culture	22.45	23.06	24.08	23.08	22.59	20.58	20.45
b. Medical and public health	5.92	6.08	5.62	5.34	4.63	4.28	5.38
2 Economic services	28.83	25.09	21.89	22.21	23.21	25.68	25.88
<b>III Capital expenditure (E+F)</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>
E Non-developmental	5.88	3.58	3.60	6.10	6.43	9.00	8.64
F Developmental	94.12	96.42	96.40	93.90	93.58	91.00	91.36
1 Social services, of which	21.62	23.43	23.63	26.54	26.96	20.58	22.24
a. Education, sports, art and culture	3.12	4.65	1.64	4.35	3.60	2.68	2.61
b. Medical and public health	2.94	2.14	2.65	2.54	2.80	2.62	6.08
2 Economic services	82.50	82.99	82.88	68.36	66.61	68.95	69.11

As a ratio to GSDP, total expenditure of all the States in the region was 30.89 per cent in 1995-96 and it had increased to 32.40 per cent by 2005-06 (Table 11.4). On developmental expenditure, the ratio was more or less stagnant but with an expectation of improvement in all its sectors. The revenue expenditure is likely to have increased more as compared to capital expenditure.

**Table 11.4: Expenditure of NER as a Ratio to GSDP**

	1995-96	1997-98	1999-00	2001-02	2003-04	2005-06	2007-08 (RE)
<b>ITotal expenditure (A+B)</b>	<b>30.89</b>	<b>30.05</b>	<b>32.26</b>	<b>31.04</b>	<b>31.41</b>	<b>32.40</b>	<b>40.68</b>
A Non-developmental	8.99	9.44	11.38	11.34	11.44	11.10	13.12
B Developmental (1+2)	21.80	20.60	20.89	19.80	19.98	21.30	28.55
1 Social services, of which	10.85	10.92	11.80	10.98	10.81	10.61	13.54
a. Education, sports, art and culture	5.99	6.10	6.82	6.40	6.28	5.82	6.88
b. Medical and public health	1.68	1.65	1.69	1.54	1.38	1.30	2.24
2 Economic services	10.95	9.69	9.19	8.84	9.16	10.61	14.00
<b>II Revenue expenditure (C+D)</b>	<b>26.04</b>	<b>25.56</b>	<b>28.03</b>	<b>26.96</b>	<b>28.09</b>	<b>28.10</b>	<b>32.62</b>
C Non-developmental, of which*	8.81	9.28	11.22	11.09	11.16	10.62	12.43
a. Interest payments	2.94	3.25	3.80	3.82	4.10	4.41	4.14
D Developmental (1+2)	18.33	16.28	16.81	15.88	15.93	16.48	20.19
1 Social services, of which	9.82	9.88	10.80	9.88	9.64	9.52	11.85
a. Education, sports, art and culture	5.85	5.89	6.85	6.22	6.12	5.58	6.68
b. Medical and public health	1.54	1.55	1.58	1.44	1.25	1.16	1.85
2 Economic services	8.51	6.41	6.11	5.99	6.29	6.96	8.44
<b>III Capital expenditure (E+F)</b>	<b>4.85</b>	<b>4.48</b>	<b>4.23</b>	<b>4.08</b>	<b>4.31</b>	<b>5.29</b>	<b>8.05</b>
E Non-developmental	0.28	0.16	0.15	0.25	0.28	0.48	0.80
F Developmental	4.48	4.32	4.08	3.84	4.04	4.82	8.36
1 Social services, of which	1.03	1.05	1.00	1.08	1.16	1.09	1.89
a. Education, sports, art and culture	0.15	0.21	0.08	0.18	0.16	0.14	0.21
b. Medical and public health	0.14	0.10	0.11	0.10	0.12	0.14	0.49
2 Economic services	3.44	3.28	3.08	2.85	2.88	3.65	5.58

### 11.1.4 Fiscal Balances

The fiscal restructuring plan recommended by the Twelfth Finance Commission and the reforms undertaken by the States in response to that has mainly been with the objective of ensuring macro/economic stability and debt sustainability. Thus, the focus has been to analyze primary and fiscal deficits. The quality of deficits was seen in terms of the proportion of revenue deficits in fiscal deficits and hence, the focus on revenue deficits (RD). Thus, gross Fiscal Deficit (FD) represents the total volume of borrowing by the States. Primary Deficit (PD) essentially represents the volume of borrowing excluding the borrowing for debt servicing and is estimated as fiscal deficit minus interest payments. The revenue deficit is measured as the difference between aggregate revenues and revenue expenditures. This shows the volume of borrowed funds used to meet current expenditures.

In terms of deficit indicators, the fiscal position of the States in NER taken together presents a reasonably satisfactory picture. The region has a surplus in the revenue account (Table



11.4 and Table 11.5A for different States in Annexure 11.1). The major reason for this may be found in the fact that according to the Gadgil formula 90 per cent of plan assistance to the special category States is given as grants and the remaining as loans in contrast to 30 per cent grants and 70 per cent loans in the rest of the country<sup>2</sup>. However, the better showing in revenue accounts position is mainly due to the surpluses generated by Arunachal Pradesh and Sikkim. Other NER States had a mixed pattern in different years but in more recent years, show revenue surpluses except in Assam. Assam had large revenue deficits relative to GSDP in most of the years.

**Table 11.5: Trends of Fiscal Balances of NER**

Fiscal Balance	1995-96	1997-98	1999-00	2001-02	2003-04	2005-06	2007-08 (RE)
A Revenue deficit	-1.36	-1.36	2.50	2.08	-0.64	-3.88	-2.49
B Fiscal deficit	4.01	3.52	8.18	6.36	3.91	1.56	5.85
C Primary deficit	1.08	0.26	3.38	2.54	-0.19	-2.85	1.61

Note: (-) indicate surpluses

Gross Fiscal Deficit as a ratio to GSDP was 4.01 per cent in 1995-96, but increased to 6.36 per cent in 2001-02 to decline in 2005-06 to 1.56 per cent. It is likely to go up again to 5.85 per cent. The fiscal situation of the region does not present any serious problem of instability or problem of sustainability. Of course, there has been deterioration in the situation of primary surplus as a ratio to GSDP of 1.08 per cent in 1995-96 to 2.85 per cent by 2005-06. But in the next year it is planned to turn around to a surplus of 1.61 per cent.

The trend of revenue deficit, which is the difference between revenue account expenditure and the revenue receipts, shows that quite often receipts have been falling short of meeting expenditure. Therefore, the States have been taking loans to meet current account expenditures.

## 11.2 Profile of PSUs in NER

Public Sector Undertakings (PSUs) are important economic agents of State economies. They implement State plans and programmes, generate employment and their performance affects the State's budget. Resource of PSUs comprise (i) paid up capital as investment from Government and other equity participation, share advance and grants and subsidies; (ii) borrowings from Government, banks and others; (iii) working capital loans as ways and means and cash credit; and (iv) their own internal resources retained as various reserves.

Loss-making PSUs pose a big challenge for the Government because, on the one hand, they have to protect employment and on the other, prevent a drain to the exchequer. There are 119 listed PSUs in NER and their State-wise break-down is provided in (Table 11.6A in Annexure 11.1). There were 94 functioning enterprises as on March 31, 2006. Of this, 83 were Government companies and 11 were statutory companies. Among non-functioning PSUs, 23 were Government companies. Assam accounted for over 41 per cent of the total PSUs followed by Meghalaya, Sikkim

<sup>2</sup> Since 2005-06, based on the recommendations of the Twelfth finance Commission, the Central Government has discontinued the practise of giving plan loans and State Plan Assistance comprises of only grants.

and Tripura at 13, 12 and 10 per cent, respectively. The activities of these companies cover various sub-sectors of both manufacturing and services (Table 11.7A in Annexure 11.1).

Total investment in these companies was to the extent of Rs. 3,826.88 crore as on March 31, 2006. Of this, Rs. 3,535.24 crore (95 per cent) was in functioning units and the remaining 5 per cent was in non-functioning companies (Table 11.8A in Annexure 11.1). Assam accounted for over 56 per cent of the total investment in PSUs in NER followed by Meghalaya, Tripura and Sikkim with over 25 per cent, 8 per cent, and 4 per cent shares, respectively. PSUs in NER provide employment to 36,494 persons<sup>3</sup> (Table 11.7A in Annexure 11.1). Over 80 per cent of these were employed by PSUs in Assam. Total accumulated losses of these PSUs were Rs. 8,202.68 crore as on March 31, 2006 (Assam alone accounted for Rs. 6,465.55 crore in this). Out of this Rs. 8,108.59 crore (98.8 per cent) was in functioning companies (Table 11.9A in Annexure 11.1). The State Governments provide budgetary support to them in the form of equity, subsidy, grant and loan.

The major cause of the poor performance of some of the PSUs is not difficult to understand. These PSUs are being managed more as State Government departments than as business entities. Government control is all-pervading in the management of the PSUs. Indeed some of the enterprises are promotional and they cannot be expected to make profits. Even in the case of power and transport utilities, it would be difficult to expect generation of significant returns (given the hilly terrain and the nature of the region). Nevertheless, the losses of such high proportions in PSUs call for a detailed study and each State should undertake such a study to identify the causes of their poor financial performance and the reform measures needed. Based on this, they should restructure the public enterprises to ensure more professional management, charging of economic prices on the products and greater accountability.

The important issue in the finances of the North Eastern States is the overwhelming dependence on Central transfers. The deficit position basically reflects the volume of transfers and the decisions on capital expenditures. The revenues raised from own sources in these States, except in Assam, are negligible. Thus, volatility in Central transfers determines the variations in deficits as well as the size of capital expenditures.

## 11.3 Plan Financing

### 11.3.1 North Eastern Council (NEC)

The Plan Schemes of the North Eastern Council include financial assistance to the North Eastern States for infrastructure, building works etc. in line with the agreed pattern of assistance of 90 per cent grant and 10 per cent loan (loans are now raised by the State Governments). During the Tenth Plan, NEC Plan Schemes focused, *inter-alia*, on completing on-going works and initiation of major projects for improved road and air-connectivity. The assistance given by NEC is mainly for regional projects.

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<sup>3</sup> Data for Manipur pertains to 2004-05. It has been reported that in Manipur all the PSUs have recently been closed and all the employees have been given golden hand shake retirement (personal communication with officials in Manipur).





### 11.3.2. Non-Lapsable Central Pool of Resources (NLCPR) Scheme

The broad objectives of the Non-lapsable Central Pool of Resource Scheme (Annexure 11.2) is to ensure speedy development of infrastructure by way of filling the existing infrastructural gaps in NER by increasing the flow of budgetary financing for new infrastructure projects/schemes in the region. Both economic and social infrastructure sectors such as power, roads and bridges, irrigation, education, health, water supply and sports. are considered for providing support under the Central pool. Budgetary support is extended for the NLCPR Plan Scheme of the ministry of DoNER against accruals to NLCPR.

### 11.3.3. Externally Aided Projects

Ministry of DONER has initiated a dialogue with the Asian Development Bank (ADB) and with the World Bank for mobilizing additional resources, introduction of professional management practices through institutional development and capacity building, improved monitoring and evaluation. The projects under formulation are the North East State Road Project (NESRP) and the North Eastern States Trade and Investment Creation Initiative (NES-TICI) with Technical Assistance (TA) from (ADB) NESRP is at an advanced stage and implementation is expected to commence during 2007-08. The World Bank has completed a study on “Natural Resources, Water and Environmental Nexus for Development and Growth in North-East India”. Specific projects are being identified in consultation with the World Bank, Planning Commission, concerned Central ministries, NEC and the North Eastern States. The World Bank has already and separately initiated project preparation work for a NER Livelihoods Project (NERLP).

Total Tenth Plan size—Rs. 80,943 crore. Of which, the respective shares were as follows: State plan—Rs. 35,861 crore (43.3 per cent), Central ministries/ Central sector/ CSS Rs. 39,441 crore (48.8 per cent), NEC Rs. 2,512 crore (3.1 per cent) and NLCPR— Rs. 3,129 crore (3.9 per cent) (Table 11.9A in Annexure 11.1).

## 11.4 The Way Forward

Public finance forms the core of the development vision of any economy/region. While it is true that the NER States are classified as special category States and are characterized by a hilly terrain, low population density, special locational disadvantages they cannot be expected to become self-reliant financially at least in the medium/term yet good fiscal health is imperative to the sustainable development and growth of NER. These States do have the potential to tread on a sustainable growth path that would lead to expansion in employment opportunities and improvement in the quality of life; fiscal discipline will only accelerate this process. However, a strong political will to take some hard measures will be required to achieve this. The broad contours of fiscal reform include augmentation of revenues, expenditure efficiency and accountability, public sector reforms and FRL. Given the special characteristics and the current situation in individual States an appropriate mix of these measures will be required for each of the States. In the present scenario, since potential of additional resource mobilization internally is limited, the fiscal reform strategy will largely focus on expenditure compression and efficiency.

## 11.4.1. Resource Mobilization

### *11.4.1.1 Reform of the Tax System*

Own tax to GSDP ratio in five NER States ranged from 1.0-2.2 per cent except in Sikkim (9.52 per cent), Assam (6.88 per cent) and Meghalaya (4.30 per cent) in comparison to all-States' average of about 8 per cent. Additional revenue can be mobilized by improving the tax administration, particularly by strengthening the information system from the existing taxes such as tax on motor vehicles and goods and passengers, professional tax, excise duty, stamp and registration fee and VAT.

Introduction of an urban land tax could also yield substantial revenue particularly in States with plantation crops. Implementation of these would require updating of land records and strengthening of the revenue administration. This is expected to bring in transparency to the system that would not only yield the tax revenue but would also ease a potential constraint in the way of private investment and thus expansion in employment opportunities.

### *11.4.1.2 Improved Recovery of Costs of Public Services*

Available estimates of cost recovery show a dismal performance. Thus it would be important to undertake a detailed study to identify areas where there may be clear scope for improving cost recovery and productivity improvements to reduce the cost of provision. Further, some subsidies may have been required to achieve the desired scale of operation, which in turn, may be constrained due to sparsity of population.<sup>4</sup> Also, in the case of services where the introduction of a service was a prime concern, the assessment of the subsidization strategy should be viewed as a revenue maximization strategy or a loss minimization strategy. While there may be a case to subsidize certain identified services and to target some services to identified disadvantaged groups, there is merit in rationalizing user charges which will enable attracting private funds both as direct investment and borrowings from the market.

### *11.4.1.3 Explore Compensation for Forest Conservation*

Forests deliver a multitude of ecosystem benefits, some of which are local or regional (e.g., protection against landslides, from soil erosion, and of local climate and watersheds) and at least two are global benefits in terms of carbon sequestration to mitigate climate change problems, and the protection of biodiversity. During our meetings with State officials one of the points that came up in at least three States related to a perception about the potential for carbon finance in the forest sector of NER. It appears that there is lack of clarity on this issue.

In principle, the global benefits of forests should motivate at least some partial payments. The Twelfth Finance Commission has, in principle, recognized the need to compensate the States with forest cover for the loss of revenue; alternative economic activities and higher cost of providing public service. However, the grants given to the States by the Commission have been meagre. It is important to make a representation to Finance and Planning Commissions collectively by all the

<sup>4</sup> Quite often the technological indivisibility of operating a service may lead to excess capacity building in the short run. The preliminary sunk cost of provisioning may inhibit any subsequent attempt to take advantage of the later technological improvements (either in the form of divisibility of operations or in the form of up-gradation of the scale of operations). This then reflects as poor planning, which unless undertaken meticulously may have severe long term implications.



States in the region to get the necessary compensation for providing this international public good.

Given that there is a trade-off between commercial and conservation benefits of forests, from even the national perspective NER should explore the possibility of resource transfers from the Central Government for the spillover benefits generated from forest conservation/opportunity cost of forest conservation. Estimation of these would, however, require detailed data which are hard to obtain.

In this context, it may be noted that the greatest gain in carbon storage and biodiversity, potentially would come from protecting mature marginal frontier forests that would have been harvested without the offset payment. Therefore, payments to protect the full forest are not necessary because the volume at risk is mainly the forests at the margins.

This, however, should not be taken to underplay the socio-economic logic behind the idea of 'compensation for conservation'. Compensation should be paid because forest rich States are also forest dependent States. Loss of revenue from resources they possess affects them in two ways. One, they hardly like to budget for maintaining and enhancing their forest resources as it is not profitable any more besides revenue compression leads to cuts in vital developmental expenditures. Two, since it is the poorest that bear the burden of conservation since their lives are crucially linked to both the resources and the services the forests provide, social and economic inequities widen and often find expression in extremism.

### 11.4.2 Expenditure Control

Reorienting expenditure priorities for the maximum benefit keeping in view the local/regional strengths and availability of services/assets/human resources which may be complementary in nature. This would, however, require a macro perspective, and intra-governmental and inter-departmental coordination. It is important that the designs and delivery structures of programmes, under the Centrally sponsored schemes and other national level schemes, provide flexibility for suitable modification, merging and combining with existing programmes to improve expenditure efficiency.

Subsidies which have not served their objectives or have become irrelevant in the present context should be repealed. For instance, with the introduction of a generous industrial policy for the NER States, many State/provided subsidies which have not been able to make a difference should be stopped. This makes a perfect case for regional cooperation.

In selective activities such as building and operation of roads and bridges and development of select sites for promoting tourism, private sector participation (PSP) can result in substantial expenditure compression. Further, PSP opens doors to modern technology and results in cost effective service delivery besides improvement in quality of services. Public-private partnership may also cover the areas of higher education, technical education, distribution of power and drinking water, collection and disposal of garbage and liquid wastes to off-load the burden on the State exchequer. This approach should be adopted with care keeping in view the interests of the vulnerable sections of society.

In the case of many social and economic services Self-Help Groups (SHGs) and cooperatives can serve as effective mechanisms for service delivery, maintenance of assets and cost recovery through user charges.

Reforms in debt and cash management would be another strategy tool in imparting efficiency in expenditure management.

There is also a tendency to create new employment in the public sector, which results in surplus staff in Government departments. This causes a burden on scarce public resources and harbours inefficiency. Identifying and retrenching excess staff at a later date places a heavy burden on the exchequer as this is evident from the voluntary retirement schemes introduced recently in many public sector banks. Efforts should be made for greater private sector participation and employment to provide expenditure efficiency.

PSUs should be given freedom to function as corporate units. Political and bureaucratic control should be relaxed. Heads of the undertakings with professional acumen and technical knowledge should be appointed.

The mechanism of financing PSUs need not necessarily be through transfers on capital account, funds can be routed to them from the revenue account which would provide incentives to the States to closely monitor the activities and performance of PSUs. Also, financial assistance from the Government should be linked to clearly established performance milestones, in accordance with a clearly established corporate plan, so that the PSUs stop being a drain on scarce public resources.

### **11.4.3 Institutional Framework and Capacity Building**

To implement the suggestions emerging from discussions in the earlier sections, appropriate institutions and capacities at all levels of Government must be created. For instance, capacity and institutions for collecting, maintaining and periodically publishing reliable data on various aspects of the economy including macro/economic indicators should top the priority list. Capacity for developing modern tax designs and user charges, revenue forecasting and analysis, rationalization of subsidies and modern techniques of tax administration should be created. Some of these tasks could be assigned to specialized institutions, and for execution of these functions, capacities may be developed in Government departments with the involvement of private institutions and/or specialized professionals.

A research unit in the finance department will also be required for formulation, appraisal and evaluation of projects differentiating good projects from the others and analyzing implications of these projects in terms of their potential in achieving the stated objectives. To enhance accountability of fiscal operations full disclosure of policy intentions, regular reports on its receipts and expenditure including contingent liabilities and deviations from budgeted estimates should be produced and made available for scrutiny.

Similarly, a project management and monitoring unit should be created. Services of professionals and practitioners should be outsourced from time to time for capacity building of



officials. State level officials should then take up the task of capacity building of the third tier of Government Officials, SHGs, and Cooperatives.

#### **11.4.4. Suggested Fiscal Measures in the NEC Vision 2020 Report**

- Set fiscal targets on the basis of a long/term macro/economic forecast.
- Constitution of State level fiscal advisory boards.
- Introduction of fiscal reform programmes.
- Reduction in administrative overheads.
- Evolving new and innovative measures for revenue augmentation.
- Making the tax system efficient.
- Better project implementation and monitoring.





PRIVATE INVESTMENT





## Chapter 12

### Private Investment

Acceleration in economic growth to realize the vision of catching up with the rest of the country requires significant impetus to market-based economic activities. Upscaling economic activities in the region would require large increases in private investment in the region. This can come about only when safety and security is ensured, property rights are enforced, efficient infrastructure and connectivity is provided, the natural transportation routes are opened up, market access for the produce from the region is provided and the State proactively acts to attract investments. In the initial years, much of the investment required for basic infrastructure will have to come from the Central and State Governments. However, in course of time, attempt should be made to promote public-private partnership (PPP), to leverage larger volume of financial resources into generating the state-of-the-art infrastructure in the region. An investment climate for active private sector participation will require reforms as discussed in this report.

Activating private participation including in horticulture, floriculture, micro, small and medium enterprises (MSMEs) and in large enterprises is necessary for accelerating economic growth to catch up with the rest of the country and to make growth more inclusive. MSMEs, in particular, have a vital role in expanding production in a regionally balanced manner and in generating off-farm employment. The policies and institutional changes should aim at creating an environment to encourage entrepreneurship at all levels. Towards this end, it is necessary to remove constraints and minimize transaction costs. To increase the number of successful entrepreneurs, it is necessary to create a competitive environment and encourage new entrants and also encourage existing ones to expand by removing cost disadvantages.

Private investment, thus, will have to play a critical role in realizing the vision. Public investment by creating infrastructure will have to create an environment for private investment. Other chapters have noted the virtual absence of a private sector in economic activities, the domination of the Government sector in economic activities and its lack of dynamism. Although changes are not likely to be seen in the short term, it is necessary to work towards creating an enabling environment.

The North East offers several opportunities for investment in the region. It is rich in natural resources, it has a large literate and English speaking population and opening up natural transportation routes will bring it closer to several international markets. Data on private investment in NER has been difficult to find; the proposed investment data from Industrial Entrepreneur Memoranda provides some indications about the intentions of private investors (Table 12.1). According to this, Assam attracts a major share of existing and proposed private investment, followed by Tripura and Meghalaya.



**Table 12.1: Extent and Potential Private Investment in the NER: 1998-2006**

State	Industrial Entrepreneur Memoranda Implemented			Industrial Entrepreneur Memoranda Proposed		
	No. of units	Investment Rs. Crore	Per cent share	No. of units	Investment Rs. crore	Per cent share
Assam	86	1,280	89.4	889	6,288	54.9
Tripura	5	82	5	440	3,510	30.8
Meghalaya	18	58	4.1	54	1,094	9.6
Manipur	1	13	0.9	65	392	3.4
Arunachal Pradesh	3	9	0.6	19	151	1.3
Mizoram	0	0	0	6	10	0.1
Nagaland	0	0	0	0	0	0
<b>Total</b>	<b>102</b>	<b>1,432</b>	<b>100</b>	<b>1,383</b>	<b>11,435</b>	<b>100</b>

Source: *Lok Sabha Unstarred Question No. 4824*, dated 26.04.2005. ([www.indiastat.com](http://www.indiastat.com))

Note: Private sector, individual, assisted sector and cooperative sector have been included.

## 12.1 Ensuring Private Investment in the Region

There is immense potential in NER for investors in industry services, the social sector and in various infrastructure projects. In fact the vision for the North East requires synergy between both private and public institutions and individuals. Some of the areas where an active private sector can play an important role and the measures needed to energize it are now discussed.

### 12.1.1 Maximizing Self-governance

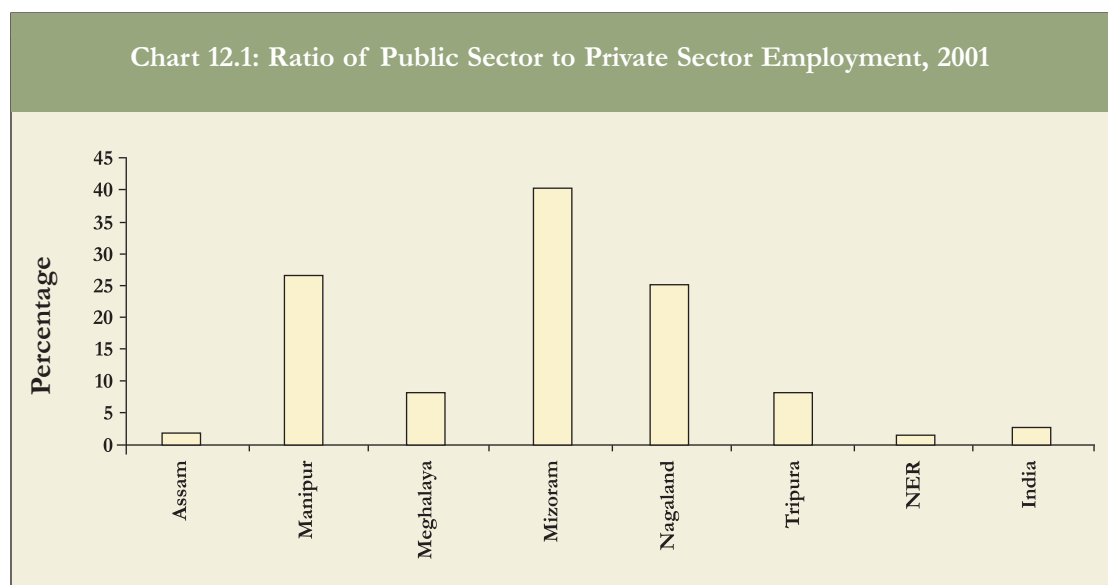
The most important precondition for businesses to flourish in the region is creating an environment of peace and tranquility and for this, responsive governance is critical. Protection of life and property, enforcement of property rights and a proactive administration are the basic prerequisites for private economic activity. Armed insurgencies in some parts of the region by various groups have vitiated the environment and so kept away private businesses. Often there are exaggerated accounts and the investment decisions are taken on the basis of perceptions rather than actual facts. While there are several reasons for insurgencies by different groups, maximizing self-governance in the region can significantly mitigate the problem. Participatory governance will create a sense of belonging and ownership of governance systems. Establishing participatory governance in the region by activating Panchayati Raj Institutions and municipalities in areas under the jurisdiction of Parts IX and IXA of the Constitution and Village Development Councils in the areas covered under Schedule VI of the Constitution with maximum participation of the people is necessary for establishing peace and tranquility in the region. Grassroots planning should help create the infrastructure according to the needs and preferences of the people to harness the resources of the region for its benefit.

### 12.1.1.1 Agriculture

In the move from largely subsistence cultivation to a surplus economy with the emergence of commercial crop cultivation, private entrepreneurs can be encouraged to set up storage, distribution and marketing infrastructure such as a cold-storage chain along major arterial highways. This is critical for exploiting the horticulture potential of the region and bringing perishables speedily to marketing hubs. The operation of the cold-chain could be on a public-private partnership (PPP) or on a lease basis. Already flowers grown in Mizoram and Meghalaya are being distributed outside the region by a private distributor, M/s Zopar, which also supplies imported seed varieties to farmers. There is considerable scope for encouraging food processing firms such as Dabur and ITC to set up processing units. However, this would require harmonization of policies by different States in the region to enable them to access the raw material from many States to take advantage of the economies of scale. This could provide significantly higher incomes to farmers growing ginger, pineapple and citrus fruits. The growing and marketing of organic food products will also depend on private sector initiative.

### 12.1.1.2 Manufacturing

The manufacturing sector is small at present, and within this, the private sector accounts for a lower proportion of employment than the public sector (Chart 12.1 Table 12.1A in Annexure 12.1). The development strategy is to expand manufacturing to absorb the surplus labour from agriculture once productivity begins to increase. There is plenty of unexploited potential for private investment in industry based on locally available resources such as natural gas and petrochemicals, bamboo, natural rubber, tea and horticultural products. The goal of creating more value for agricultural produce within the region will also call for greater investment in agro-processing, bamboo processing, handicrafts and so on. In this too the private sector can play a crucial role in providing the latest designs to artisans and in marketing and exporting their products.



Source: *Employment Review* for various years, Directorate General of Employment and Training





The proposed strategy will create employment opportunities in some service sectors such as tourism, transportation, hospitality and IT and ITES. Private investment and know-how will play an important role in expanding all these areas. The kind of tourism proposed by the States given their low carrying capacities such as adventure and eco-tourism, are best delivered by private individuals. Mizoram, for example, recognizes the important role of outside tour operators in attracting tourists to the State, and is trying to work out joint ventures between its local tour operators and bigger agencies outside NER. Further, private investors should be encouraged to increase the supply of hotel rooms (currently in short supply in most States), as the fixed costs would be too high for private operators given the perceived threat of insurgency.<sup>1</sup> The private sector should also be involved in organizing carnivals and cultural festivals and operating tours for people from outside the region.

#### *12.1.1.4 Infrastructure*

Private partnerships are proposed in the developing of power and telecommunication networks to link the region, through the PPP mode. Most of the commissioned projects are (or would be) in the Central sector or under private partnership (Table 12.2A in Annexure 12.1). Arunachal is expected to generate an additional 22,584 MW hydel power by 2020 in 166 hydel projects all over the State. Of this, only 88 MW is to be created under State projects, with the remaining being set up through Central and private projects. The Sikkim Power Development Corporation Ltd., (a State Government enterprise) has negotiated for 24 projects under the PPP (BOOT) model as joint-venture projects with an estimated cost of Rs. 15,628 crore to generate more than 3,288 MW power (Table 12.2A in Annexure 12.1). The period of contract for availing of concessions is 35 years and Government support in terms of equity and grant is negotiated with different ratios (10 per cent, 26 per cent and 49 per cent) with various private companies. It shows that if congenial circumstances prevail, private investors will be forthcoming in injecting capital for development in infrastructure.

Another area of infrastructure proposed for PPP is the development of fairways and infrastructure related to inland-water transport in the region.<sup>2</sup>

#### *12.1.1.5 Education*

Since education is the pathway to economic advancement, the strategy for expanding education must also pay attention to ensuring equitable access. Private inputs are needed to supplement Government efforts to universalize primary and secondary education and to improve facilities such as laboratories, computer infrastructure or sports facilities. Computer education could be entirely outsourced to the private sector which can provide equipment and teaching for a fee. In higher and professional education it can help with the proposed expansion in vocational training, professional institutes and other efforts to expand the pool of employable talent in the region. The region has already seen the emergence of private professional institutes such as the Sikkim Manipal University. Significant focus will have to be on skill development in the region. Information technology training companies like NIIT should be encouraged to open branches in the region.

<sup>1</sup> Possibly the best model would be a partnership with private operators who could run the hotels on a long-lease basis (as was followed in setting up the main hotel in Kohima, Hotel Japfu, about 15 years ago. This method would also get around the problem of land use/sale restrictions in most of the hill States.

<sup>2</sup> Recommended by the Study Group on Inland Water Transport, (World Bank, 2006).

PPP models which involve industry representatives in the management of ITIs can be successful in providing relevant skills to the youth in the region (see Box 12.1). There are a number of vocational training and entrepreneurship development institutes in other parts of the country and such institutions should be encouraged to operate from the region with clear guidelines and systems to accredit them and regulate their functioning. An appropriate certification system should be instituted to certify skills of trainees graduating from various institutions. The Central Government should provide the necessary guidelines and support for establishing appropriate mechanisms and State Governments should institute certification bodies to issue certificates for a variety of skills (Planning Commission, 2006).

#### **Box 12.1 : Public-Private Collaboration in Job-Oriented Technical Training**

In Assam, the State Institute of Rural Development has collaborated with private companies such as the Punjab National Bank and Bosch Machine Tools, to provide training to unemployed young people at its Institute for the Development of Entrepreneurs in Assam (IDEA), in Kahikuchi outside Guwahati. The main aim is to equip people with skills and basic business acumen to initiate their own businesses. Trainers from private companies provide two-week training in improved design and production in handicrafts (with a focus on bamboo-based crafts), cluster-based horticulture development (especially vegetable cultivation), the use of machine tools and others to groups of students.

#### **12.1.1.6 Health**

The private sector is already engaged in NER in working with State Governments or alone at the tertiary, secondary and primary levels of healthcare: by managing public health facilities, running major tele-medicine units within a public hospital, providing laboratory and blood screening services at the secondary and tertiary levels (Tripura) and operating a full-fledged hospital within a medical college (Sikkim Manipal University). It is also necessary to start nursing institutions in the region.

### **12.2 Enabling Private Investment: The Way Forward**

Enabling private investment in the region will call for a shift from the current policies which focus on providing subsidies and incentives such as easy credit facilities, tax holidays, export promotion parks and capital investment subsidies to one of minimizing transaction costs. Inflows of private capital are more likely to be enticed by a responsive administration and governance, availability of critical inputs like power, connectivity and other infrastructure and access to markets. Similar problems may result from land laws and existence of age-old common property rights in many States in the region. The functioning of markets in the region also calls for greater transparencies in resource-sharing policies, including land. Other prerequisites for the emergence of markets are the establishment of banking and other financial intermediation.



### 12.2.1 Land for Private Investment

The region is subject to myriad land tenure systems; while acquiring land to set up an enterprise is not difficult in some parts, in some States people from outside cannot legally buy or lease land. Land is owned by the community, so no individual transactions can take place. Private investment in these areas is practically non-existent, but is becoming more important as the development process gathers momentum. Thus, while industrial policy resolutions in these States propose leasing land for setting up industry, lack of ownership rights may pose a hurdle to industrialization.

States have followed different paths in dealing with this issue depending on the Constitutional rights accorded to their respective communities: in Meghalaya, for example, the State can take over land for developmental purposes if it is in the 'tribal interest.' State Governments have to clearly spell out the different ways in which entrepreneurs and enterprises can safely and legally acquire land for industrial activity.

### 12.2.2 Expanding the Supply of Professionals and Skilled People

Much of the region is labour-scarce, and in these areas the proposed increase in economic activities will be hampered unless steps are taken to expand the labour pool. A related concern is the high wage rates in the region, especially in hill States, which have deterred private investment, especially in labour-intensive activities. Shortages of professionally trained people and skilled workers are especially acute due to lack of good training facilities and weak quality of instruction in the region.<sup>3</sup>

In the short-term, the region needs to open up to outside labour to allow economic development to take place, and at the same time to enhance and update the quality of training available.

### 12.3.3 Improving Enabling Infrastructure: Connectivity and Power

The lack of market-enabling infrastructure in the region has been well documented. The development of markets is vital for private investment, and this can only happen with speedy connectivity (by road, train or other means) and efficient modes of communication. Some degree of inter-Governmental planning is important for developing a well-coordinated infrastructure that will enable large-scale transportation of inputs and finished products to market hubs and from there to final consumers.

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<sup>3</sup> During a field visit to industrial enterprises in the Bodhjungnagar Industrial Growth Centre outside Agartala, the study team was informed that a major hurdle in setting up the manufacturing unit was the lack of skilled manpower in the State. Initially, managers had to bring in skilled workers from outside Tripura, but they are now hiring local ITI graduates who may not have the skills but display an aptitude and potential for training.

### 12.3.4 Ensuring a Secure Environment

An important issue in the North East relates to the security of life and property. Lack of proper law-enforcing mechanisms within a State may cause market failures or in other words prevent the emergence of markets. Law and order across the States, calls for a joint-security management approach developed by all the States together, rather than the present disjointed-security systems.

## 12.3 Suggested Measures of NEC Vision 2020 for Financing Development

- Micro-credit is of special importance as more than 80 per cent of the farming communities are marginal farmers with little access to credit.
- Coverage of entire region under NABARD's Potential Linked Credit Plan by 2015.
- Expansion and strengthening of the SHG-bank linked credit system. The number of linkage units should be raised to at least 50,000 by 2015 and to 1 lakh by 2020 from the existing 5,000 units.
- SHGs engaged in farming and non-farming micro-level enterprises should be increased to reach 1 lakh by 2015 and 2 lakh by 2020. A special drive needs to be launched for this.
- NEDFI and SIDBI should create a separate micro-credit fund of Rs. 1,000 crore only for the North East.
- The number of bank branches should increase and the branches of all-India financial institutions need to be doubled by 2015.
- The credit-deposit ratio should go up to 45 per cent by 2010; 50 per cent by 2015; and 60 per cent by 2020.
- States will need to make special efforts to strengthen the structural base to ensure the efficient performance of rural micro-enterprises and emergence of more SHG-led enterprises.
- The level of priority sector lending by banks should be increased to at least 40 per cent by 2020 by creating local competitive entrepreneurship on a wider scale.
- State administrations need to work together to create a conducive environment for the success of rural micro-enterprises, e.g., by motivating people, promoting the market and creating a sound infrastructure base.

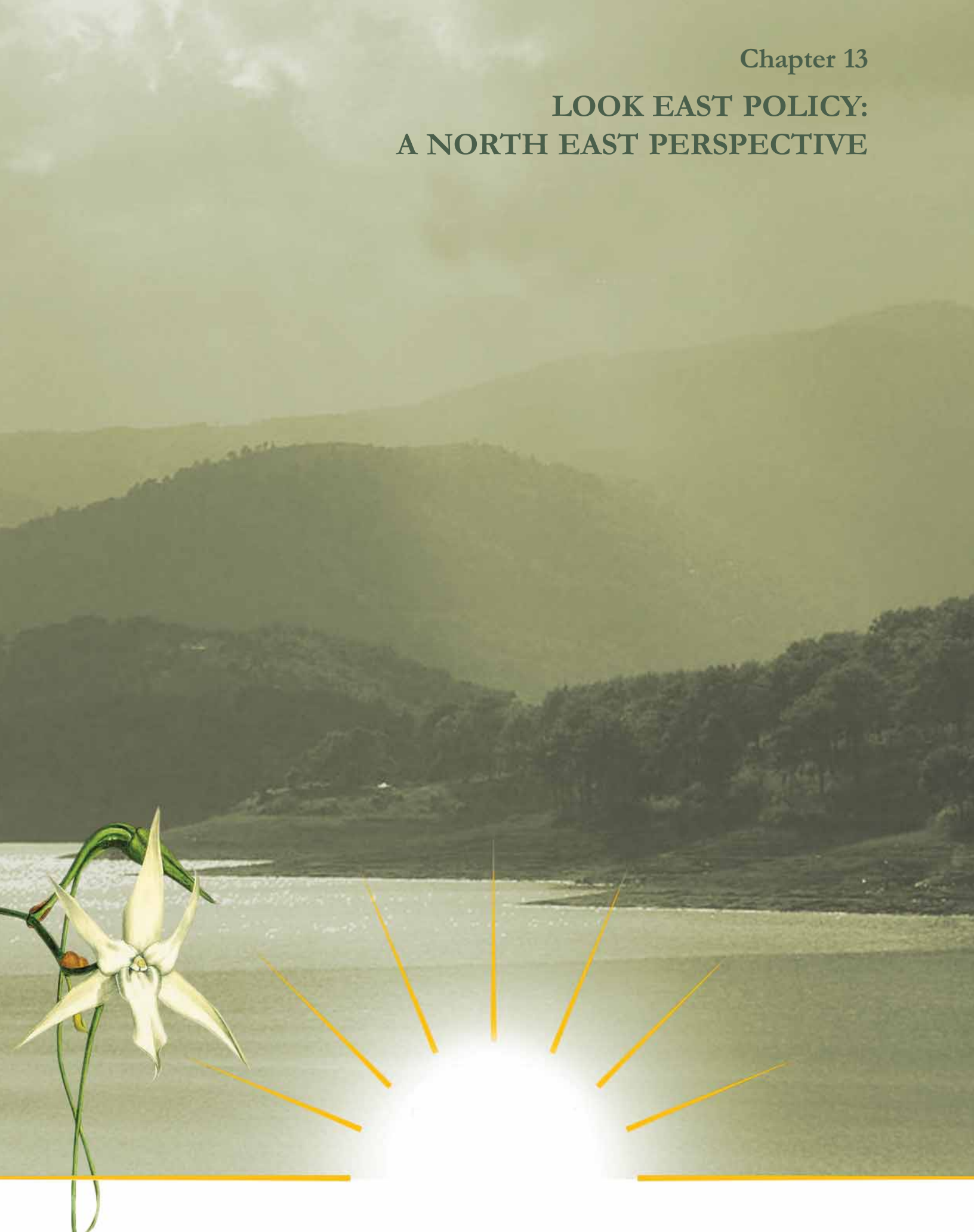






Chapter 13

**LOOK EAST POLICY:  
A NORTH EAST PERSPECTIVE**





### Look East Policy: A North East Perspective

No vision for NER is complete without a discussion of the Look East Policy and the opportunities for trade and development associated with it. While it is not easy to date the exact emergence of the Central Government's Look East (LE) Policy it would be reasonable to infer that it was more or less part of the official policy launched in 1991. The basic logic for the policy stems from the landlocked nature of the NER States and their long international border. The NER States share 98 per cent of their border with Bangladesh, Bhutan, China, Myanmar and Nepal while a narrow strip of land constituting just about 2 per cent links the region with the rest of India. It is this tenuous geographical link with the country that leads to virtual isolation and high transport cost of supplies to and from the rest of the country. This has been the logic for the transport subsidy given in all the industrial policies for the NER States.

The LE policy should be an important factor in promoting economic ties of the NER States with its neighbours with a view to ending its economic isolation (Aiyar, 2008a). Further, given the close geographical proximity of the NER States with the neighbouring countries it is not surprising that the people of this region share cultural ties with the residents of these countries.<sup>1</sup> Finally, strengthening India's relations with its South Asian neighbours and China are now an important part of India's foreign policy. Hence, in discussing the implications of the policy for NER we will consider the cultural, security, economic and administrative dimensions that drive the policy before looking at its implications for trade and development of NER.

Ironically, despite the fact that the Look East Policy has been in existence for more than a decade and a half and even as it has substantially benefited the States in other parts of India, its benefits to NER has been negligible. Logically, the Look East Policy must begin with NER. However, as far as the region is concerned, the policy has remained a slogan and has not as yet evolved into a harmonious and productive relationship with neighbouring countries. Thus, despite the Look East Policy, NER remains under economic imprisonment within its international frontiers.

The peace and development of the region critically depends on liberation from this economic imprisonment. This would require a quantum change in the relationship with neighbouring countries which the Government of India should continue to strive for. Developing economic linkages on mutually beneficial terms and strengthening cultural ties that have historically existed are important. Indeed, in economic terms, the Look East Policy should go beyond the immediate neighbours and reach out to the markets in East Asian and South East Asian countries. The policy can yield rich dividends only when it is realized by all stakeholders both nationally and internationally that 'South East Asia Begins where North East India ends' (Aiyar, 2008 b). This would require significant initiatives to open the natural transportation networks through the sea, inland waterways and land routes.

#### 13.1. Cultural Dimensions

The cultural links between NER and the people of the neighbouring countries have existed for hundreds of years. From Eastern Burma/Myanmar and Northern Thailand and their cusp

<sup>1</sup> For some excellent compilations on the LE policy see *Dialogue Quarterly*, July-September, 2008.



with Yunnan came the Tai-Ahoms of the Shan ethnic group, who ruled Assam for 600 years until the British overthrew them. Today, Arunachal Pradesh, Nagaland, Manipur and Mizoram share a 1,643 km. long border with Myanmar.

Most of the people living in Arunachal Pradesh are either of Tibetan or Thai-Burmese origin. Another 15 per cent of the population is immigrants, including 30,000 Bangladeshi and Chakma expatriates, and immigrants from other parts of India, notably Assam and Nagaland (Hunter, 1898). Towards the north, the history of Sikkim involved a series of wars involving China, Bhutan and Nepal. In 1891, China sent troops to support Sikkim and defend Tibet against the Gurkhas. In a more recent development, Tripura was heavily affected by the partition of India and the majority of the population now comprises Hindu Bengalis, many of whom came as refugees from East Pakistan after independence in 1947. Tripura thus has a strong ethnic link with Bangladesh and shares the longest border with that country. However, armed conflict in Tripura has been a problem since the end of the 1980s as an aftermath of the 1971 Indo-Pak war (Bhattacharjee, 1994; Palit, 2004). Cultural links, as a part of the LE Policy, must be urgently facilitated by people-to-people contacts between NER and neighbouring countries. This could be done by promoting interaction in musical, sporting and other such events in which neighbouring countries could be invited to participate.

## 13.2 Security Dimensions

At the same time, India has tried to promote relations with Bangladesh as part of various SAARC initiatives. For the Indian subcontinent, promotion of harmonious relations among the partners of SAARC is as much a security imperative as an economic compulsion (Bhattacharjee, 1994; Palit, 2004). India must continue to pursue trade facilitation for mutual benefit. In particular, considerable gains can be had by minimizing transportation costs and creating businesses based on local economies. Access to Chittagong port for the NER States is critical for the development of NER. There are also considerable gains to be had from enabling passage of people besides goods through inland waterways.<sup>2</sup>

However, India has made considerable headway in obtaining a sea-link for NER States to the Sittwe port in Myanmar which is one crucial link in the chain of efforts to end the landlocked isolation of NER from the rest of the country. Needless to say, Myanmar also plays an important role in helping India deal with some of the extremist outfits operating in NER States (Sanajaoba, 2003).

## 13.3 Economic Developments in the Look East Policy

The LE Policy should promote commercial links between NER States and the neighbouring countries to try and break the economic and geographic isolation of this region from the rest of the country. In particular, the emphasis should be to promote trade links. The following sections will look at some of the measures taken in the context of trade with Myanmar, Bangladesh and China and how much more needs to be done in this regard. (The analysis is based on quantitative information given in Annexure 13.1). Since new trade links take some time to develop, we will look at both the short-and long-run trade strategies as part of the LE Policy for NER. Thus, while in the

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<sup>2</sup> At present, goods can be transported through inland waterways passing through Bangladesh. However, it is important to enable access for the transportation of people as well.



immediate short-run of the next few years, the strategy should attempt to promote ties of NER with its immediate neighbours, in the long-run NER must look beyond its borders to tap into the benefits of India's burgeoning trade with the ASEAN bloc.

### 13.3.1. NER trade: Short-run considerations.

In the short-run the most important issue is to promote trade of NER with its immediate neighbours. This is often referred to as border trade. In Charts 13.1 and 13.2 we look at the progress of border trade in the last few years in terms of volume and major items traded.

As can be seen from these Charts total exports and imports through the region have hovered around Rs. 400 crore for the last few years despite trade agreements. About 91 per cent of exports come from tea and coal. The region largely exports primary products like boulder stone, limestone and fruits. The contribution of manufactured good to the export basket is negligible. Exports of items produced in other parts of the country through NER like motor parts, umbrellas and printed garments, are also not very significant. About 50 per cent of imports into 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.

To examine why trade with the neighbouring countries has not been a propellant for development in the region it is useful to analyze NER's trade with each of its neighbours.

#### 13.3.1.1 Myanmar

There have been some useful compilations on Indo-Myanmar trade (Das et al., 2005). Among the LE countries, Myanmar is the only member of ASEAN with which India shares a

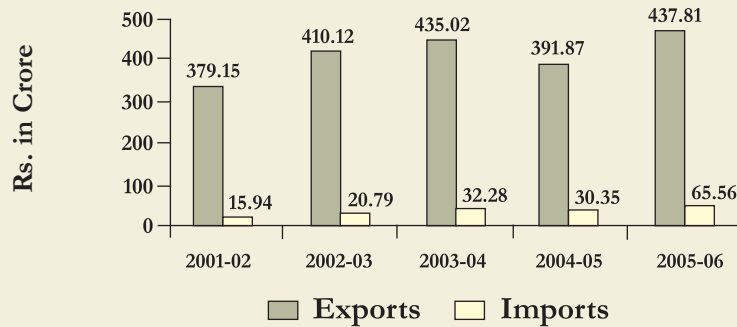


Minister Aiyar with H.E. Krik-Krai Jirapet, Minister of Commerce, Thailand and Shri Jairam Ramesh, Minister of State for Commerce in Agartala



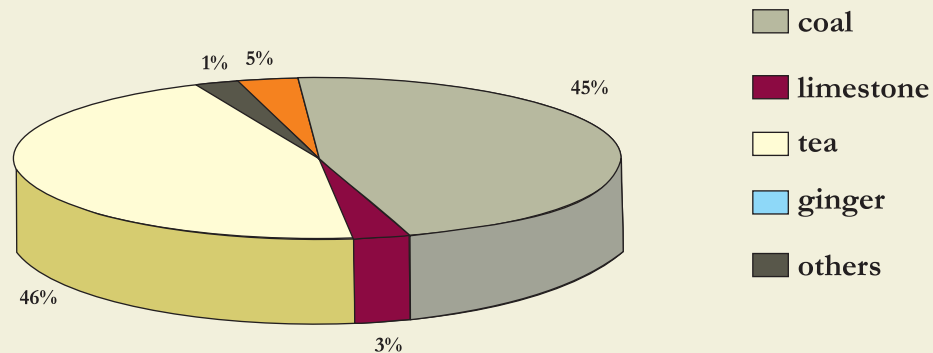


Chart 13.1: Export and Import to and from NER



Source: Task Force on Connectivity and Promotion of Trade and Investment in the NERs, Planning Commission, GOI, (Oct 2006)

Chart 13.2: Major Items of Export



Source: Planning Commission (2006)

common land border. In fact, in addition to the other reasons for Myanmar's importance for the NER States, is the fact that India's trade with Myanmar grew enormously in the 1990s, although not as much as Myanmar's trade with China (Table 13.1A in Annexure 13.1). Between 1998-98 and 2005-06, India's volume of trade with Myanmar doubled though its importance in India's trade declined. Myanmar's trade with India is an insignificant part of India's trade (about one-tenth of a percentage in 2006-08) but is quite large in relation to the size of the economies of the NER States.

As far as the major trade items are concerned, India's exports to Myanmar consist mainly of iron and steel and pharmaceuticals (63 per cent of total exports), electrical and non-electrical machinery (10 per cent of total exports), cycles, auto-parts and accessories and cotton yarn. Major items entering India are blankets, electronic goods, betel nuts, pulses, teak, groundnuts, iron scrap, gold, silver and precious stones. However, among registered imports, wood and wood products and vegetables account for about 98 per cent of total imports (for more details see Tables 13.2A and 13.3A in Annexure 13.1). It is important to remember that internationally Myanmar is one of

the few countries which can supply *tur dal* which is an item of mass consumption in India, where the domestic production is insufficient.<sup>3</sup> The post-cold war foreign policy calculus of India in general and the LE policy in particular has created an enabling environment which can break the landlocked condition of NER by opening it to the markets of the neighbouring countries across the border, establishing joint-venture enterprises and bringing cross-border investments for the development of infrastructure, manufacturing and services. The LE Policy acquires special significance in the light of cross-country initiatives for economic cooperation like the Bay of Bengal Initiative for Multi-sectoral Technical and Economic Cooperation (BIMSTEC) and Mekong-Ganga Cooperation (MGC).

Some important infrastructure initiatives have also been launched to promote NER trade with neighbouring countries. The Asian Highway Link, Asian Railway Network and a Natural Gas Pipeline Grid projects under active consideration of BIMSTEC have tremendous implications in removing the communication isolation of NER. While NER will have access to the Asian Highway through the Imphal-Tamu feeder road, the railway systems of India and Myanmar are planned to be linked at the Dibrugarh railhead, which will give NER access to the Asian Railway Network. India constructed a road in 2001 in Myanmar linking the township of Tamu with the railhead at Kalembo which connects Mandalay, the commercial hub of Myanmar. There is a proposal to construct a 1,360 km. Trilateral Highway from Moreh (India) to Mae Sot (Thailand) through Bagan (Myanmar). The detail project report on this is under progress (Strategic Digest, 2004). With the signing of India-Thailand Free Trade Agreement (2003), the steady rise in two-way trade with Myanmar and spectacular growth in Sino-Indian trade, the prospects of NER becoming a hub for transit trade are only brightening.

However, one must add that there is a perception that the LE thrust has not yet produced any perceptible tangible benefits for NER.<sup>4</sup> The opening of border trade with Myanmar, through the provision of the Indo-Myanmar Border Trade Agreement (1994), has not had any major impact on the regional economy,<sup>5</sup> as India's ASEAN trade continues to be conducted mainly through the sea route. The continental land route via NER-Myanmar-Thailand is not yet considered safe and cost-effective. Moreover, India and Myanmar have also agreed to open four checkpoints for increasing trade between the two countries. These include the Pangsau Pass, Paletwa, Lungwa-anyong and Pangsha-Pangnyo. There has been one significant downside to India's trade links with Myanmar. According to the Annual Report (2001), of the International Narcotics Control Bureau, the 1,643 km Indo-Myanmar border has been utilized as a transit point between the Golden Triangle and the Golden Crescent. Some studies have argued that the mismatch between India and Myanmar's trade statistics is large due to the drug trade (Association for Environment and Development Research, 1999).

To look at some of the reasons why trade between India and Myanmar has not taken off it is useful to look at the Indo-Myanmar trade agreement of 1994 (see, Annexure 13.2). We have already noted that NER is largely an agricultural based economy. In earlier chapters we have noted the need to improve productivity of agricultural products and transform the region to one producing crops for the market. However, the Indo-Myanmar trade agreement has restricted the scope of

<sup>3</sup> In 1998, Myanmar offered land for cultivation to India on a lease basis in the Kubaw valley, which excited interest but was not pursued (Verghese 2001, pp. 184-5).

<sup>4</sup> This was the conclusion reached by a number of participants at a symposium held in Mizoram in November, 2006. (See Mizoram University Symposium 2006 J.K. Patnaik in the same volume).

<sup>5</sup> Das (2005) see also report of the Task Force on Connectivity, Planning Commission, October 2006.



agricultural trade in enlarging the market for the agricultural produce of NER. For one, trade is restricted to border residents and allowed only in non-motorized vehicles. Further, trade is restricted to barter trade under the Reserve Bank of India barter mechanism. Third, even in this barter trade imports from Myanmar must precede exports from NER. Fourth, no monetary trade transactions are allowed and normal trade is only permissible in items other than the specified 22 agricultural items. Finally, even this barter trade (for value less than \$20,000) is subject to usual customs documentation which is far too complicated for the few who engage in such trade.

Hence, it is clear that administrative restrictions (see also Section 13.4 below) have prevented even border trade from increasing over time.

### *13.3.1.2 Bangladesh*

India's exports to Bangladesh are dominated by agricultural commodities and cotton although, in recent years, machinery and transport equipment have been gaining importance (Table 13.4A in Annexure 13.1). However, the volume of exports is still very small in relation to India's total trade. India's imports from Bangladesh are dominated by inorganic chemicals, vegetable and other fibres and fish products (about 85 per cent of imports). (Details are given in Table 13.5A of Annexure 13.1). In general, Bangladesh has had a consistently unfavourable trade balance with India due to an insufficiently diversified export basket (Table 13.6A in Annexure 13.1). Inland-water trade between India and Bangladesh is important in linking not only Assam but States like Arunachal to Bangladesh. Water-borne trade is more important than land trade with Bangladesh (from a comparison of Tables 13.7A and 13.8A in Annexure 13.1). There are urgent and longstanding concerns in Bangladesh arising from the perennial, large bilateral trade deficit with India, and from the large volumes of informal imports accounting for 15-50 per cent of Bangladesh's imports from India across the land border to avoid Bangladesh import duties. It is also worthwhile to see what per centage of India's trade with Bangladesh via the land custom stations (LCS) takes place through LCS located in NER. Calculations show that only about 5.3 per centage of (legal) trade with Bangladesh takes place through LCS located in NER.

Concerns regarding Bangladesh's high trade deficit in its trade with India have been particularly acute on the Bangladesh side in the context of discussions between the two Governments on the possibility of a bilateral free trade agreement (FTA) along the lines of the India-Sri Lanka FTA. Due to size disparity, the trading relationship between the two countries is far less significant for India than it is for Bangladesh. Nevertheless, closer economic integration with Bangladesh is seen as a very important way of reducing the economic and political isolation of the eight north eastern States from the rest of the country. Under South Asian Free trade Area (SAFTA), the preferential tariffs agreed in the various rounds of SAARC Preferential Trading Agreement (SAPTA; which so far has been largely ineffective in generating much intra-regional trade) will continue, but a number of ambitious new objectives have been enunciated. These include the eventual elimination of tariff and non-tariff barriers on trade between the members, the harmonization of customs procedures and documentation, the facilitation of banking relationships and cooperation and improvements in the infrastructure for regional trade and cross-border investments.

We have noted that almost all of India's trade with Bangladesh is water borne and thus has little relation to NER which has no port links. One aspect of the Indo-Bangladesh trade that concerns NER is what is known as informal trade. It is worth looking at this in some more detail.

### 13.3.2 India's Informal Trade with Bangladesh

It may be noted that most of the Indo-Bangladesh trade which affects NER in particular is of the informal border trade variety. Ever since Bangladesh's independence there has been substantial informal, unrecorded trade across the India-Bangladesh land borders and a number of studies both in Bangladesh and in India have dealt with different aspects of it (World Bank, 2006). Much of this trade is quasi-legal and is best characterized as 'informal' rather than illegal, because there is wide participation by local people in the border areas, the trade generally bypasses customs posts, and because—as S. K. Chaudhuri's classic study noted—'the field operators generally operate *in liaison with* the anti-smuggling enforcement agencies'. Informal trade of this kind usually involving large numbers of local people individually transporting small quantities—often just as headloads or by cycle rickshaws—is sometimes called 'bootleg' smuggling.

At the other extreme there is trade which goes on in larger quantities— mostly by truck—through the formal legal customs posts and other channels, but which involves explicitly illegal practices such as underinvoicing, misclassification and collusion and bribery of customs and other officials, and which in Bangladesh is sometimes called 'technical' smuggling. While it is difficult to get documented data on such trade some indicative numbers are given in Table 13.1. While this trade is minimal particularly from India's point of view, it is important for the border communities and is the kind of trade which will use the formal channels as and when border trade procedures become more trader-friendly.

**Table 13.1: India's Informal Trade with Bangladesh, 2002:  
Bangladesh Imports from India**

Items Smuggled	2002 Bangladesh Survey*	Goyal: Financing Report**	Trade	Difference
Live animals (mainly cows & buffaloes)	100	222		+122
Sugar	28	250		+223
Rice	9	30		+21
Wheat	14	48		+34
Onions	1	10		+9
<b>Total</b>	<b>151</b>	<b>560</b>		<b>+409</b>

Source: *World Bank* (2006).

Note: \*The 2002 study is the first documented attempt to estimate the size and scope of 'technical' smuggling.

\*\* There are a number of other estimates of the approximate total size of technical smuggling, but none of them explain in detail how the estimates are arrived at. Estimates in the Goyal study were based on the opinions of relatively few people and may not be reliable, since the focus of the study was on financing and they were not systematically checked against the estimates of other informed people. However, Goyal's estimate for sugar smuggling is roughly consistent with the sugar case study, which estimates sugar smuggling at between \$180 million and \$215 million in 2001-02 and from \$100 million to \$128 million in 2002-03. A partial explanation for these discrepancies may be that Goyal's and the sugar study's estimates were including 'technical' as well as 'bootleg' smuggling, whereas the Bangladesh surveys which distinguish individual products are in principle for 'bootleg' smuggling only. Even so, the resulting discrepancy in the estimate of total land border smuggling is very large. For example, the total discrepancy of just these five commodities as reported in Goyal's study, would about double the survey-based total (bootleg + technical) estimate for 2002-03 from \$422 million to \$831 million, and assuming a smaller discrepancy for sugar of \$100 million, still increases the total survey-based estimate by about 40 per cent, from \$422 million to \$808 million. These very large differences underline the importance of coordinated contemporaneous surveys on both sides of the border with iteration between the survey teams involved to explore and narrow down discrepancies.



Unfortunately, all the studies which have aimed to quantify cross-border smuggling—including the 2002 Bangladesh survey, the 1998 Bangladesh surveys reported by Rahman and Razzaque and the 1994 NCAER survey—have faced time and resource constraints which would have been needed for this kind of coordination, and therefore, are based solely on the analysis of survey results dealing with imports in the case of the Bangladesh surveys, and on exports in the case of the 1994 NCAER survey in India.

However, an inspection of Tables 13.1 and 13.2 clearly indicates that trade is largely in agricultural commodities. This reflects the nature of the economies of both Bangladesh and NEER which are largely agrarian. As in the case of Myanmar, border trade in agricultural commodities between NEER and Bangladesh can help expand the market for agricultural commodities for NEER economies. In addition, there is a large demand for agricultural products, meat, eggs and fish products which NEER presently imports from the rest of the country at very high costs. It would seem that importing these products from Bangladesh would be cost effective and also solve the problem of insufficient imports from Bangladesh. However, the existing high tariffs on Bangladesh imports (see Planning Commission, 2006) and the lack of border trade infrastructure has limited this trade to the informal variety which is unlikely to increase dramatically. It is necessary to convert this informal trade to formal border trade between NEER and Bangladesh. In particular, zero duties on such trade should be included in Indo-Bangladesh trade agreements. The operation of SAFTA should take this into account.

**Table 13.2: Commodity Composition of Informal Trade, India-Bangladesh (2002)**

Items	Share of Total (per cent)
Cows and buffaloes	43 per cent
Agricultural products, pulses and timber	14 per cent, of which 90 per cent is rice and wheat
Processed foods	18 per cent, of which 88 per cent is sugar
Textiles	16 per cent, of which sarees are 63 per cent
All other	10 per cent, around 43 products

Source: *World Bank*. (2006)

### 13.3.2.1 China

China's economic importance in world trade and as one of India's major trade partners has been growing.<sup>6</sup> It is a measure of the growing trade between the two countries that border trade is now to be resumed formally between them via the Nathu La Pass in Sikkim. The road from Gangtok to Nathu La is being expanded to accommodate container traffic, and infrastructure is being developed at the trade mart at Sherathang. Development of infrastructure at Nathu La is being financed by the Central Government (Rs. 18.88 crore during 2006-08, of which the department of commerce has provided Rs. 2.16 crore), the Ministry of Home Affairs and DONER (Rs. 8.84 crore and Rs. 9.08 crore, respectively). A study on the various aspects of border trade through Nathu La has been conducted by NCAER and is under examination for appropriate action.<sup>7</sup>

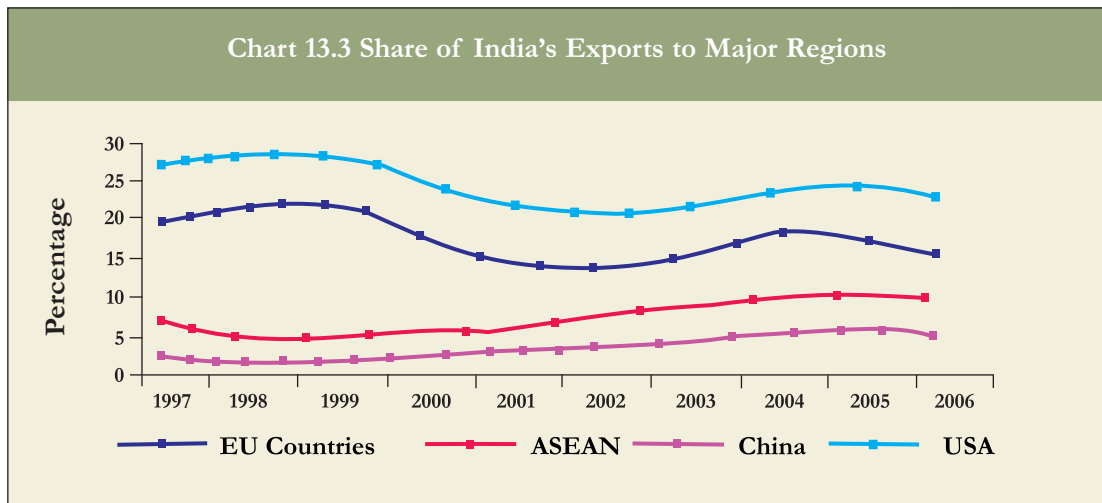
<sup>6</sup> Mining and quarrying, metal and metal products, chemicals and chemical products, textiles, clothing and leather, food, beverages and tobacco, agriculture and hunting, machinery and equipment, coke, petroleum products and nuclear fuel, electrical and electronic equipment, precision instruments, motor vehicles and other transport equipment, wood and wood products, forestry and fishing products and rubber and plastic products have been some of the principal items in Sino-Indian trade in recent years (see Table 13.6A, Annexure 13.1 for details)

<sup>7</sup> 'Trade Promotion Initiatives in the North East Region'. Also available at <http://commerce.nic.in/annual2006-08/html/chapter12.html>



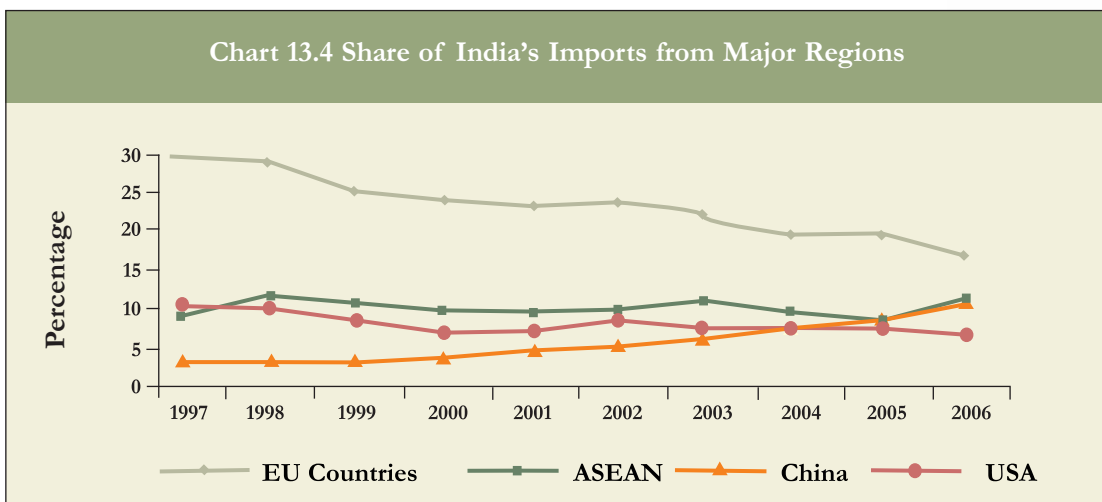
The details of the commodities in India's trade with China are shown in Tables 13.9A and 13.10A in Annexure 13.1. About 85 per cent of India's exports consist of ores, chemicals (organic and inorganic) and iron and steel. India's imports consist mainly of electrical products, mechanical machinery, organic chemicals and silk (about 80 per cent). The growth of India's trade with China has been phenomenal with China's share in India's total trade going up from around 2.5 per cent in 1998 to around 8 per cent in 2006 (see Charts 13.3 and 13.4). India also has a substantial trade deficit with China.

Chart 13.3 Share of India's Exports to Major Regions



Source: *Export-Import Data Bank*, Ministry of Commerce, Government of India

Chart 13.4 Share of India's Imports from Major Regions



Source: *Export-Import Data Bank*, Ministry of Commerce, Government of India

However, from the point of view of NER the main trade likely to occur in the next few years is border trade via the Nathu La Pass. Currently, the permitted trade via Nathu La is mainly barter trade in 44 items with a transaction value of Rs. 25,000 in one day and little customs formalities. The items allowed for export are agricultural implements, blankets, copper products, clothes, textiles, cycles, coffee tea, barley, rice, flour, dry fruits, dry and fresh vegetables, vegetable oil, *gur* and *misri*, tobacco, snuff, cigarettes, canned food, agro-chemicals, local herbs, dyes, spices, watches, shoes,



kerosene oil, stationery, utensils and wheat and for import are goat skin, sheep skin, horses, goats, sheep, wool, raw silk, yak tail, yak hair, china clay, borax, seaibelyite, butter, goat cashmere and common salt. However, so far little benefit can be observed due to problems of road connectivity, trade restrictions and short operational period (Planning Commission, 2006). It may be noted that the only point at present for border trade is the Nathu La pass.

### *13.3.3 The LE Policy: Long Run Considerations*

The ASEAN countries' share in India's total trade went up from around 8 per cent in 1998-98 to over 10 per cent in April-December 2006 (Table 13.12A in Annexure 13.1), compared to 18 per cent for EU, 8 per cent for China and about 10 per cent for the US. The changing country composition of India's trade shown in Charts 13.3 and 13.4 indicate that there has been a diversification of trade away from EU and the US to China and ASEAN. This has been one significant consequence of India's LE Policy.

Within the ASEAN, India's major trade partners are Thailand, Malaysia and Singapore. One of the important developments of India's LE Policy has been the expansion of trade with its South East Asian neighbours. However, very little of the benefit of this trade has gone to the NER region as most of the trade is sea borne (Aiyar, 2008b).

The commodity composition of India's trade with ASEAN countries is given in Tables 13.12A in Annexure 13.1. Almost 50 per cent of India's exports to ASEAN consist of mineral products (fuels and oils) and gems and jewellery. Another 20 per cent consists of organic chemicals, iron and steel and animal fodder and waste. In the case of India's imports, about 50 per cent consist of electrical and non-electrical machinery, vegetable oils and fats and mineral fuels and oils.

Hence, it is clear that for NER to tap into ASEAN trade in a more organized way it would have to develop a more mature industrial sector and much better air and sea connectivity. In particular there are wood products, ores and rubber products which could be profitably developed in NER for trade with ASEAN. This should be part of a trade strategy for NER in the next decade or so.

## **13.4 Administrative Measures to Promote NER Trade**

Apart from economic incentives, trade is also facilitated by a host of administrative measures which facilitate the growth of trade. A number of such measures have been taken up in the context of the NER, particularly in light of the growing importance of the LE Policy.

One important initiative has been bilateral trade agreements with bordering countries.

- The Indo-Myanmar Trade agreement was signed in 1994. Some details of the agreement are given in Annexure 13.2. The trade agreement is quite restrictive and largely promotes border trade. Traditional free exchange/barter trade is restricted to the 22 items agreed upon by the two countries, finding mention in Schedule I of the Agreement. While normal trade is possible for all items under OGL, trade in agricultural items and forest based products is restricted to border residents under headload restrictions and under barter deals.

- There is also the Kunming Initiative of 1999 under which non-official policy makers and businessmen meet to discuss ways of promoting cooperation between China, Myanmar, Bangladesh, China and NER. In one important infrastructure initiative, the inland waterway project between India and Myanmar on the Kaladin river link NER to the Sittwe port in Myanmar. There is also a proposal to link the port via a highway from South Mizoram.

In addition, some administrative measures have also been announced at the level of the Central Government. An Empowered Committee under the Chairmanship of the Commerce Secretary functions in the Department of Commerce to monitor and implement the initiatives for the North Eastern Region following the announcement made by the Prime Minister in January 2000 for the development of the North East known as 'PM's Action Plan for the North East'. The Committee also monitors the implementation of the recommendations of the Task Force on Development of Border Trade and Inter-Country Trade from the North Eastern Region, which goes into issues concerning infrastructure constraints in the North East and the measures needed to overcome them. With a view to promoting exports from the region, a North East Cell has been set up in the department of commerce. Consequent to the announcements made by the Prime Minister for the development of exports from the North Eastern Region, an Export Development Fund (EDF) was set up with the objective of promoting exports from the region, especially with the neighbouring countries like Bangladesh, Bhutan and Myanmar. Activities, which have a linkage with exports from the region, are eligible for assistance from the fund. Recent visits by the Minister of State for Commerce to Shillong and Agartala have led to specific Action Points for infrastructure relating to trade facilitation in Meghalaya and Tirpura (see, Annexure 13.2).

Finally, overland trade is normally conducted through land customs stations (LCSs). The current status of LCS in NER is given in the Annexure (Table 13.13A in Annexure 13.1). LCSs are notified gateways for transit of goods, services and human beings between neighbouring countries. India has 136 notified Land Customs Stations, of which the following 11 in the North East have been identified for prioritization for development of infrastructure:

- |                           |                      |
|---------------------------|----------------------|
| 1. Agartala               | Tripura-Bangladesh   |
| 2. Borsorah               | Meghalaya-Bangladesh |
| 3. Dawki                  | Meghalaya-Bangladesh |
| 4. Demagiri               | Mizoram-Bangladesh   |
| 5. Ghasuapara             | Meghalaya-Bangladesh |
| 6. Karimganj Steamer Ghat | Assam-Bangladesh     |
| 7. Moreh                  | Manipur- Myanmar     |
| 8. Old Raghana Bazar      | Tripura-Bangladesh   |
| 9. Srimantapur            | Tripura-Bangladesh   |
| 10. Sutarkhandi           | Assam-Bangladesh     |
| 11. Zokhawthar            | Mizoram-Myanmar      |

An Inter-Ministerial Committee under the Chairmanship of the Commerce Secretary is coordinating the steps taken by various Ministries and agencies for the development of trade in the



North East including border trade along the Indo-Myanmar and Indo-Bangladesh borders. Development of export infrastructure in four border towns of Moreh, Sutarkandi, Dawki and Zokhawthar has been given priority. The Central Warehousing Corporation (CWC), the appointed agency for the development of export infrastructure at Moreh, Dawki and Sutarkandi, has conducted a study of the infrastructure facilities required at Moreh (Manipur), Dawki (Meghalaya) and Sutarkandi (Assam) under the erstwhile Critical Infrastructure Balance Scheme (CIBS). The infrastructure at Zokhawthar is being developed by the Border Roads Organization (BRO) in cooperation with the Government of Mizoram.

Some other elements of subsidy are given to promote trade (exports and imports) via NER. For example, inland transport assistance would now be available with respect to identified products to all the north eastern States.<sup>8</sup> The rates of inland transport assistance are quite generous—90 per cent of the air freight charged by the airline from any airport in the NER States to Bagdogra, Guwahati or Kolkata for exports. In case of highly perishable commodities, 50 per cent of the air freight charged by the airline from any airport in the north eastern States to Delhi or Mumbai airports for exports. Rs. 1 per kg. or actual freight paid, whichever is less, if the goods are transported from anywhere in the North East by road for exports through any notified LCS in the North Eastern States or through Guwahati airport. Rs. 2 per kg. or actual freight paid, whichever is less, if the goods are transported from North Eastern States to Kolkata or any other port by rail through ICD, Guwahati for exports. Rs. 2 per kg. or actual freight paid, whichever is less, if the goods are transported from North Eastern States by rail through ICD, Guwahati to any place in West Bengal for processing and export.

In addition, storage facilities are also being provided. Thus, a common pack house facility is being set up by the Assam Industrial Development Corporation for processing and handling of fresh ginger for exports. A post-harvest handling-cum-auction centre for fruits and vegetables is being considered for Mizoram. Walk-in-type cold stores are being set up at Imphal, Aizawl and Dimapur and a centre for perishable cargo at Guwahati airport. The following proposals for funding through the Export Development Fund have been approved:

- .. Passion fruit in Mizoram and Nagaland
- .. Ginger in Manipur and Nagaland
- .. Mushroom processing in Manipur and Nagaland
- .. Turmeric processing in Nagaland
- .. Vanilla processing in Manipur
- .. Safed musli in Assam
- .. Bee-keeping in Mizoram
- .. A lab for testing export products in Assam
- .. Cluster development of farms for organic farming is under preparation for Nagaland and Tripura

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<sup>8</sup> NCAER study, also available at <http://commerce.nic.in/annual2006-08/html/chapter12.html>



The State Trading Corporation (STC) has set up a branch at Kolkata which is engaged in international and domestic trading from West Bengal and other North Eastern States. The various activities undertaken are:

- .. Imports of Vanaspati from Nepal to cater to the requirements of Assam, Meghalaya, Mizoram and the rest of India.
- .. Import of hydrocarbons for power plants generating power mainly for eastern and North Eastern States.
- .. Trade in raw jute and tea.
- .. Supply of pulses and tea to the defence forces, and the supply of pulses to the domestic market.
- .. Export of muli bamboo from Tripura and Mizoram thereby helping the local growers/traders of these States.

Agri-Export Zones (AEZs) have been set up for the North Eastern Region in Tripura for pineapples; Sikkim for floriculture, orchids, ginger and cherry and; Assam for fresh and processed ginger.

### 13.5. Recommendations of Previous Studies

Ever since the mid-1990s, every study of the NER States has talked of the need to pursue the LE Policy. The Shukla Commission also dealt with this in some detail, its main recommendations being upgradation of infrastructure like the Tamu-Kalewa-Moreh road (now completed), and the rail link to Bangladesh and developing the Asian road link through Myanmar to Laos and Thailand. However, while recognizing the existence of transit trade it suggests the establishment of production facilities for medicinal products, bicycles and so on in NER in a Special Economic Zone (SEZ). The issue is whether NER can move beyond being a mere transit point for such goods from other parts of the country.


In another set of studies (Mizoram University Symposium, 2006) participants from various States of NER discussed the possibility of NER becoming a common market like the European Union. While the usual infrastructure linkages were stressed upon one of the participants noted that 'India can hardly look eastward without also looking at the North East Region!' (p. 9). The presenters at the symposium posed the important issue of lack of land linkages within NER, which is recognized as a major constraint to the development of the 'common market' in the NER.

### 13.6 The Way Forward

Critical to the progress towards prosperity in NER is its liberation from economic imprisonment. This would require a qualitative change in the relationship of the country with the neighbouring countries contiguous to NER. There are considerable gains to be had by improving relations. In the case of Bangladesh, for example, there could be significant gains from transit fees and access to the markets in NER. This could contribute significantly to the reduction in Bangladesh's







trade deficit with India. Given that economic interests of NER are affected by the nature of relationship with these countries, it is important that the Foreign, Defence and Home Ministries have a consultation process with the States in NER to take account of their views.

Various political, economic and cultural factors have shaped the making of the Look East Policy for the north-east. To give effect to the policy, a large number of administrative measures have been taken in recent years to promote NER trade. The recommendations of various studies to develop infrastructure at Moreh and open up other trade points has also seen considerable progress. Yet, despite this so far the LE Policy has not delivered any concrete economic gains to the NER States. To look at the place of the LE Policy in the long-term calculus of the NER States it is important to understand some important principles governing trade between countries, the basic premise being that it is companies/individuals who conduct trade and not Governments.

The most common form of trade between geographically contiguous areas is border trade, already taking place between the NER States and bordering countries and is in fact formalized in agricultural trade under the Indo-Myanmar trade agreement. Typically, border trade is (at an organized level) in commodities where transport costs are high in relation to the final price of the product (examples of such products are timber, cement, coal and other minerals). This trade would take place naturally and the State needs to only facilitate it administratively and via road and rail infrastructure.

However, for a majority of the items traded internationally, transport costs account for only about 5 per cent of the final price. In fact, estimates by UNCTAD (2005) show that in most cases trade barriers (formal and informal) are more restrictive for trade than transport costs. Hence, there is a limit to overland trade promotion via the NER States and it is not surprising that most Indo-Bangladesh trade is conducted via West Bengal given the insecurity of trading via the NER States (Chaudhari, 1995). A transport subsidy to NER States is unlikely to overcome this problem. In fact, troubled relations in Manipur has made even the relatively more developed Moreh trading post relatively redundant, to the extent that informal trade will need greater incentives to convert to legal trade and formal trade is unlikely to divert via Manipur in place of West Bengal. Coal/limestone trade has sustained the trade link between Meghalaya and Bangladesh,<sup>9</sup> but it is debatable how long 'rat-hole' mining in Meghalaya will be sustainable given environmental concerns in NER in general.

Promoting trade between the NER States and the neighbouring countries requires going beyond the calculations of 'geographical contiguity' and looking at those commodities in which the NER States have a comparative advantage in an economic sense. Here two main points need to be made. First, there are a few agricultural items in which the NER States have a comparative advantage vis-à-vis the rest of the country (see chapter on Agriculture). The NER States can actively consider trading these items only when their own domestic surpluses become sufficient, and domestic surpluses are constrained by the lack of marketing due to uncoordinated production efforts of the individual States. This is particularly true in the case of fruits and vegetables. Second, it is debatable that NER trade with neighbouring countries is always more profitable (and hence more likely) than with the rest of India. Many growth centres like Kolkata, Delhi and Mumbai offer economically larger markets than those of Bangladesh and Myanmar. This is already showing up in the nascent

<sup>9</sup> [http://www.ide.go.jp/English/Publish/Jrp/pdf/jrp\\_133\\_05.pdf](http://www.ide.go.jp/English/Publish/Jrp/pdf/jrp_133_05.pdf).

floriculture industries of NER where exports are mainly to Guwahati, Kolkata and Delhi and even to Holland at the international level. This, however, does not mean that promoting trade with neighbouring countries is not important, but that the strategy should look beyond and create the infrastructure for trading with the rest of the country and internationally based on comparative advantages.

Third, the dynamics of trade in agricultural products is somewhat different from the dynamics of trade in industrial goods. Trade in agricultural items is generally of the inter-industry variety since product differentiation is not easy while trade in industrial goods admits of so-called 'intra-industry' trade (Krugman and Obstfeld, 2000) In agricultural items the excess demand in the NER States for items like meat, meat products and fish make them potentially important import items, so supplies from neighbouring States are likely to be cost-effective. However, this is largely ruled out by the restrictions on such trade, for example, in the Indo-Myanmar trade agreement. Further, the pattern of Indo-Myanmar and Indo-Bangladesh trade indicates that the demand of both Myanmar and Bangladesh is largely for industrial items such as processed foods and drinks (including animal foods), miscellaneous minerals and manufactured goods, textile fibers, textiles and clothing and machinery and transport equipment. While there is a good possibility for exports of agro-processing industries and floriculture-based industries, it is debatable that the best markets for these lie in the adjoining countries. Hence, the immediate need seems to be to promote trade in basic agricultural commodities (rice, fish, pulses etc.). Booming trade relations with China are reflected in the urgency to make free border-trade via the Nathu La a reality. The caveats offered earlier in the case of border trade apply with equal force here.

In summary, the kind of trade being promoted is important: whether it is border trade or 'regular' trade. In border trade, benefits would accrue to the NER States from storage, customs and tourism, which are typical for such 'transit' States. In addition, there are likely to be significant advantages of trade in agricultural items as these are normally perishable. However, for these benefits to accrue, the restrictions imposed on agricultural trade (a feature of all RTAs entered into by India) must be relaxed. In the context of border trade, in the longer term there are possibilities of increased trade in items like timber products, cement, steel and coal for which industrial capacities in NER will have to be built near the location of mineral resources.

In the case of 'non-border trade' items, the current State of industrial activity suggests that the maximum scope is for trade in agro-processing and floriculture. Perhaps the best way to promote trade under the LE Policy is to create the infrastructure and let the traders decide the direction of trade. Finally, in the context of the LE Policy, it is important to note that attempts to promote trade with neighbouring countries without promoting trade within the region are unlikely to succeed. Here the issue of intra-State road linkages is crucial.

### **13.7 Recommendations for the Look East Policy**

- To immediately increase border trade in agriculture and some industrial goods it is necessary to remove current restrictions on border trade via Moreh, Nathu La and other entry points.
- Unrestricted trade with neighbouring countries in agricultural and meat products could lead to considerable reduction in the costs of these items in NER.



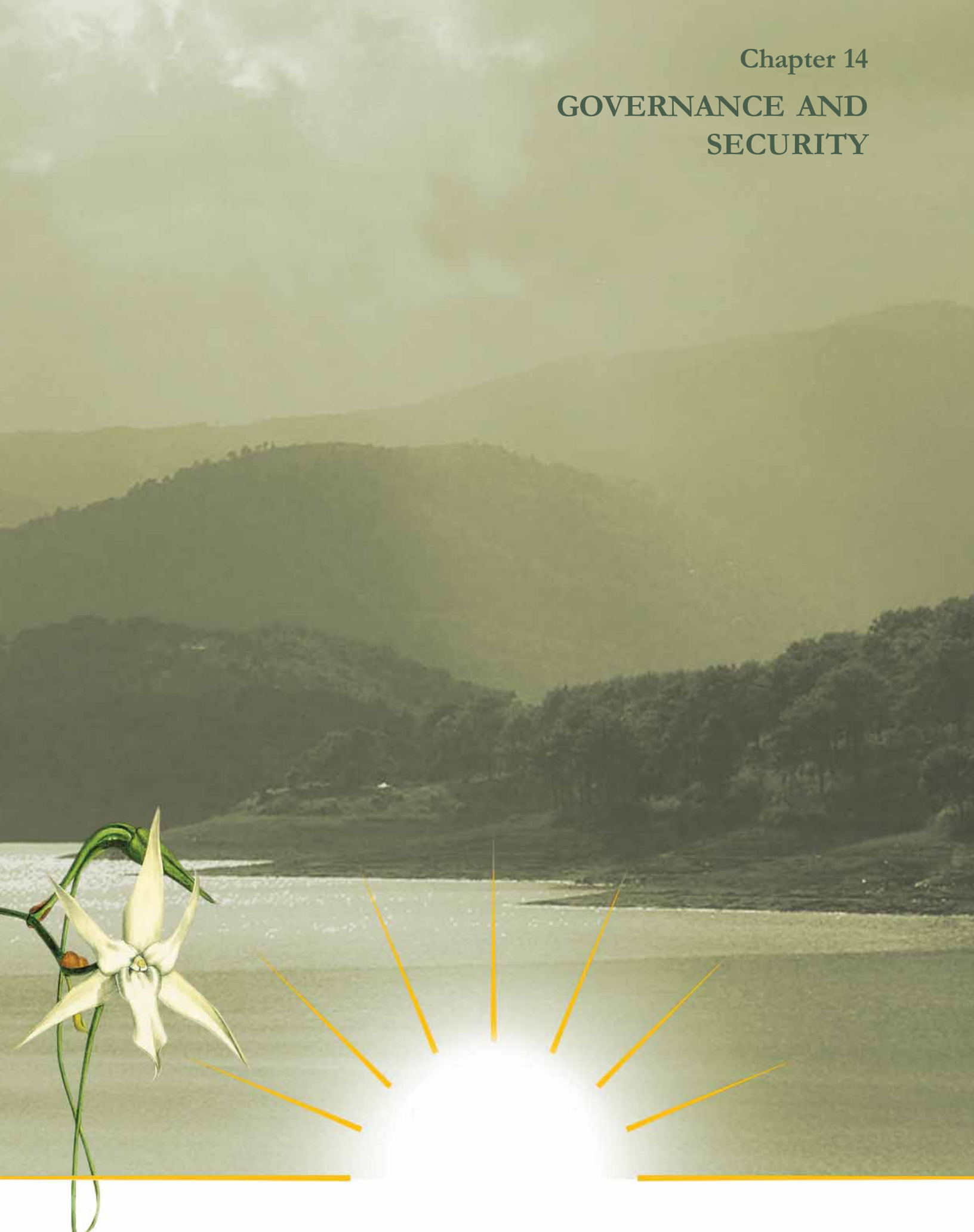
- The LE Policy has important security dimensions. There is urgent need to promote interaction with neighbouring countries through sports, music and other cultural activities.
- In the case of neighbouring countries which are members of WTO, formal request for trade facilitation would improve trade access for NER States.
- In the longer term, industrial output of NER should cater to the demand for industrial goods in the neighbouring countries. This is particularly important for border trade in items like cement, coal, timber and steel.
- To facilitate trade it is essential to activate existing land-customs stations (LCS) and to provide a secure transport corridor for traders.
- In the long run, NER needs to plug into the growing trade with ASEAN countries particularly in items like wood products, ores and rubber products.
- It is imperative to integrate IT facilities in promoting infrastructure for trade with the ASEAN countries.



Minister Aiyar on a boat ride on the Kaladan river



Chapter 14  
**GOVERNANCE AND  
SECURITY**







## Chapter 14

### Governance and Security

Establishing peace and security and responsive governance is an essential prerequisite for development. The only long-run solution is rapid economic progress, but this is difficult in a politically unstable environment. This is the crux of the issue of underdevelopment in NER, as will be discussed later in this chapter. The region is inhabited by diverse communities with different ethno-linguistic origins, religious beliefs and tribal practices, cultural ethos and above all an irreconcilable historical past. Their interests are often in conflict with one another and their aspirations are not easily reducible to any common denominator.

The question of governance, therefore, should be posed in a somewhat broader perspective in the context of NER. It is not sufficient to club all the States into one group—say northeast—it is also necessary to be able to create a unified economic and political vision for the region. It is indeed a difficult task to be achieved. One possible way might be through increasing inter-dependences amongst the States by means of greater economic unification of NER. A necessary prerequisite for such unification is synchronization of development policies of the States. What needs to be emphasized is that without a cooperative approach to governance, it is not possible to achieve permanent peace in this region. And unless there is permanent peace, no development efforts will ever bear any fruit. What this essentially means is that a northeast political vision must precede a northeast economic vision.

Governance in a somewhat narrower sense implies imposition and execution of a system of rules and regulations which can provide law and order in a society that can ensure security of life and enforce property rights of the people. In playing this role, a Government can be exclusive, in the sense that it can perform this role independently of people at large. However, in a modern democratic society a Government also has to play many inclusive roles, which means it has to depend on the cooperation as well as participation of the people in administering its functions. For instance, a Government has to play the role of a prime mover of development in a society where market forces may be unable to generate progress for good reasons. A well-known example is that under the market mechanism there is an under-supply of public goods such as the means of communication, water and power, education and health, management of forests and common property and various other social utilities. Moreover, a modern welfare state has a moral responsibility to ensure a degree of social, economic and political justice in society. Hence, the State is morally bound to adopt certain optimal redistribution policies. To perform such roles efficaciously, the State has to mobilize resources through taxation and cost-recovery policies. While the efficiency of the Government is determined by its ability to mobilize the maximum amount of resources on the one hand, its success as a provider of good governance depends on its ability to redistribute the benefits optimally to its citizens.

Besides the maintenance of law and order, a Government of a welfare State plays an important role in the economy—it runs/promotes and if necessary creates enterprises, builds capabilities in the people through human development and determines policies and regulates markets, with far-reaching implications for growth and social welfare. Of course, the present trend in a globalizing world demands least Governmental intervention in an economy, with its role being



limited as far as possible to that of an enabler and facilitator in a market-based system. However, in the context of the northeast where States' ability to generate resources are limited and private initiatives are almost absent, direct Governmental intervention is necessary.

## 14.1 Governance, Law and Order and Security

The basic foundation of the market-driven development path is based on the assumption of the existence of an organized and efficient market system. However, for an efficient market to exist certain basic preconditions need to be fulfilled. A primary requirement for a market to function properly is that there should be proper law and order such that any transaction can be carried out in the market without any fear or coercion. The second important precondition for markets to function is the presence of well-defined property rights. In the absence of either of these two conditions, either the market fails to exist or it functions wrongly.

In the discussion on development alternatives in the context of NER this crucial point is often ignored. In several of the NER States, markets do not exist for many commodities, either due to extortions and fear of life and property (consequence of extremism) or because of the absence of well-defined private property rights (land, for example) or simply due to poor connectivity.

## 14.2 Law and Order in the North East

Barring Sikkim, a latecomer to the North-east (it became part of the North Eastern Council formally in 2002), parts of the region have been convulsed by conflicts between the State and armed groups, as well as popular movements, fighting for a range of demands—from outright secession to greater ethnic autonomy within the Constitution. One of the longest running armed movements has been the Naga insurgency, which started in the 1950s, and today has moderated



Shri Shivraj Patil, Union Home Minister, with Dr. Donkumar Roy, Chief Minister of Meghalaya on an inspection in Meghalaya

into organizations that are in active negotiations with the Central Government for a long-term settlement. Ceasefires are in place with both major factors of the National Socialist Council of Nagalim (NSCN) while ceasefires are also being observed with a number of others in Meghalaya, Assam, Manipur and Tripura. In Mizoram, however, a peace accord between the Mizo National Front and New Delhi, which was inked in 1986, has held firmly, with former insurgents rising democratically to high political offices such as Mr. Laldenga and Mr. Zoramthanga, who have served as Chief Ministers.

Not less than 40 armed groups function in seven States, although only a clutch are dominant and powerful enough to make a substantial impact. The smaller ones function often either as extortionist rings or as part of a network of informers and rent collectors for the bigger ones. Not less than 15 groups were banned by the centre, although the ban on the NSCN factions was lifted when the ceasefires with each group started.

While large parts of the region are not harmed by insurgent or security activities, the confrontations and subsequent emotional and geographical distance from Delhi have been fuelled by poor governance, high levels of corruption and political instability in some of the States.

Many of the armed groups are widely viewed in NER as extortionist, money-making rackets which have lost public support and have become, in the eyes of many, illegal enterprises which prey on fear and vulnerability and profit from extensive corruption, rent-seeking and poor governance.

### 14.3 Law and Order: Evidence from the States

Violence caused by terrorism has been increasing over the years<sup>1</sup> (Table 14.1A in Annexure 14.1). In 2001, 23.13 per cent of the total terrorist incidences in India took place alone in this region, which increased to 28 per cent in 2005 and further to 29.4 per cent in 2006. Among the NER States barring Sikkim and Mizoram, the incidence of terrorism is highest in Manipur and lowest in Mizoram. Manipur, Assam and Nagaland are the most terrorist-affected States in the region. Assam shows the highest number of civilians killed due to terrorist violence, which was around 11 per cent of the total civilians killed in India in 2001 due to terrorism. The number of civilians killed declined marginally in 2006; the number of security forces killed increased in NER to the corresponding figure for India. The most terrorist-ridden States in the region are Assam, Manipur, Nagaland and Tripura.

The rise in terrorism has had an impact on the strength of the police force being maintained in these NE States. The number of police per 100 sq. km. has increased sharply over the years in all these States (Table 14.2A in Annexure 14.1). An important point to be noted is that the four States, namely, Assam, Manipur, Tripura and Nagaland, had higher number of police force per 100 sq km as well as per lakh of population in comparison to the national figure in 1981. Although the number of police per lakh of population declined for both India as well as for these NE States, the numbers were still higher for the NER than the national average. However, with regard to the number of IPC cases per civil police, except for Assam the rest of the NE States show lower figures as compared to the national average.

<sup>1</sup>Data on terrorist activity in the country is available in the *Statistical Abstract of India* which gives information on Jammu and Kashmir, the North Eastern States and Naxal-affected States.





Table 14.3A (in Annexure 14.1), gives information on the expenditure on total police force and police training per one lakh of population. It can be seen from this Table that in the NER States this number is higher than the national figure. Among the North Eastern States, although Assam spends a lower amount than the rest, its expenditure is still higher than the national amount. Police expenditure per lakh of population is higher in Nagaland, Mizoram and Sikkim compared to the other NE States. Similarly, Nagaland and Mizoram spend much more in comparison to the other States in police training. It is, therefore, clear that a huge amount of resources is being diverted for policing.

It is quite evident from this analysis that the law and order and security situation is a matter of concern in the NER States. At present, there is a ceasefire in Assam and Nagaland. The ceasefire in Nagaland has been fairly effective in maintaining peace and order, but the situation in Assam has been getting increasingly tense in the recent past. The situation in Tripura is also no different. In such a politically volatile situation developmental activities are hindered by the fear psychosis. This is amply reflected in the economic performance of all the States whether one looks at their GDP growth, industrial growth or per capita income growth. Clearly, the success of developmental policies crucially depends on establishing law and order in these States.

## 14.4 Views of Various NER Committee Reports on Law and Order

Earlier committee reports (Shukla Committee and Jain Committee) on NER have ignored this crucial issue in their analysis of the developmental requirements for these States. The State Development Reports also have not discussed the issue of governance, although they emphasize the issues of decentralisation, involvement of women in governing institutions, transparency in the functioning of local Governments etc.

## 14.5 Steps Taken By The Government To Ensure Peace, Security And Human Rights<sup>2</sup>

In order to ensure peace and security in the region the Central Government has taken several necessary steps such as entering into several peace talks and ceasefire agreements. For instance it has signed a formal ceasefire with the Isak Muivah groups of the NSCN w.e.f. August 1, 1998, which was extended to July 31, 2008, and another ceasefire agreement with NSCN (K) in April 28, 2004, which was extended up to April 28, 2008. A group of ministers has been constituted to hold talks with the NSCN (I/M). A Suspension of Operation (SoO) was signed on May 24, 2005 between the Central Government, the Government of Assam and NDFB w.e.f. June 1, 2005 for a period of one year. SoOs have been signed with Hima Halan Daogah (DHD), a militant outfit of Assam w.e.f. January 1, 2003 (later extended to December 31, 2008) and with ANVC w.e.f. July 23, 2004 for a period of one year (later extended to July 22, 2008).

In order to ensure peace and security, the Central Government has increased the reserve battalions<sup>3</sup> and so far 34 such battalions have been sanctioned for NER. The Government is also implementing a scheme for reimbursement of security-related expenditure for States seriously

<sup>2</sup> Based on the *Annual Report 2006-08 on Internal Security*, Ministry of Home Affairs, Government of India.

<sup>3</sup> IRBNS was mooted by the Ministry of Home Affairs in the background of increasing problems of law and order and emerging internal security scenario in the country, which put considerable pressure on CPFs (see *Annual Report 2006-08*, Ministry of Home Affairs).

affected by insurgency. The Central Government has also been funding schemes for the modernization of the State police forces. It has formulated a 100 per cent Centrally funded 'surrender and rehabilitation scheme'. While these measures are important in the short-run, lasting peace and security requires resolution of the basic causes of dissatisfaction. It is in this context that the maximization of self-governance and participatory development strategy is important.

## 14.6 Causality between Insurgency and Development

Underdevelopment is caused by insurgency and terrorism and therefore all developmental efforts will be in vain, unless political volatility is controlled simultaneously. Thus, the development vision for NER should focus on the primary requirements of safety and security in these States. However, there is an alternative view which maintains that insurgency is the cause of underdevelopment, in which case the vision would be to hasten the pace of development to solve the problems of insurgency in the long run. However, the causality runs both ways. That is, insurgency and unemployment resulting from poor economic development feed on each other. Thus, poor economic performance contributes to rise in insurgency and hence the solution for insurgency lies in the achievement of rapid economic progress of the region.

And indeed, commonality of such a view can also be found in the writings of professional economists (see Sachdeva, 2005) as well as in the official position on long-term approaches to solve the problems of insurgency in NER. The current official position on the solution also advocates rapid economic development. As a logical conclusion of this line of argument, NER is cast today in India's Look East Policy paradigm. Since the 1990s, political dialogue has been emphasized as the key to peace building.





While insurgency cannot be solved by economic development, the latter can be a tool for improving socio-economic conditions. However, both in the medium and the long-term, only political dialogue and initiatives, which accommodate a range of concerns, and are based on mutual trust and flexibility, not exclusivity, and produce goodwill not ill-will, can settle these challenges.

Insurgency and underdevelopment, especially unemployment, feed on each other. Poor governance, corruption and economic performance sustain conditions for insurgency and alienation.

The current official position, however, and the view of some professional economists (Sachdev, 2005) promote rapid economic development through huge public investments in infrastructure, particularly pressing ahead with a Look East Policy that places NER in such a paradigm. Yet, in the areas currently afflicted with politically volatile situations, markets are unlikely to exist or provide the right signals. As a consequence, private capital does not flow into the region in search of investment opportunities—in fact, there is a reverse flow of financial capital out of the region. To quote a well-known economist from the region:

‘.....due to inhospitable investment environment, savings arising in the region get outlet into the more investment friendly region. This largely explains very low credit-deposit ratio in NER States. Such asymmetrical market integration—a large inflow of goods into and outflow of savings from the region—has impeded the pace of growth in the region.’

Thus, insurgency continuously hampers the economic performance of the region, so rapid economic development will not be possible without a proper strategic and security policy by the Central Government.

Under prevailing circumstances profit-seeking private investment is unlikely to flow into the region and, therefore, public investment has to play a more proactive role in boosting the rate of economic growth. In particular, public investment must be made in such activities as creation of infrastructure such as roads, bridges, railway coverage, power generation, proper drainage system, flood control and water harvesting, irrigation (both minor as well as major), drinking water, hotels and transport facilities, airport construction in inaccessible areas and reliable and fast-moving public transport. The creation of such infrastructure can raise agricultural productivity which is a sine qua non for rapid growth through industrialization. Without increasing income-generating possibilities in the rural sectors of the economy necessary forward and backward linkages for industrialization cannot be created. Thus public investment alone will help in the creation of a critical mass which will facilitate private investment from outside the region.<sup>4</sup> The 19<sup>th</sup> century saw massive trade and investment in the plantation sector of Assam, but the tea industry had no linkages with the rural economy; it developed as an enclave and hence rapid investment and export growth had no impact on the earning potentials of the rest of the economy.

Thus the role of the States would be to ensure certain basic minimum prerequisites: free and unhindered mobility of goods and services (infrastructure) across the region as well as within the region; well-defined property rights; and law and order and security of life, such that markets can function and reflect the truescarcy costs of goods and factors.

<sup>4</sup> Dr. Hiren Gohain thus argued that development and decolonisation are two sides of the same coin. The only way to decolonise the economy is by creating income-earning opportunities in the rural economy. See Gohain, Hiren, (2005).



