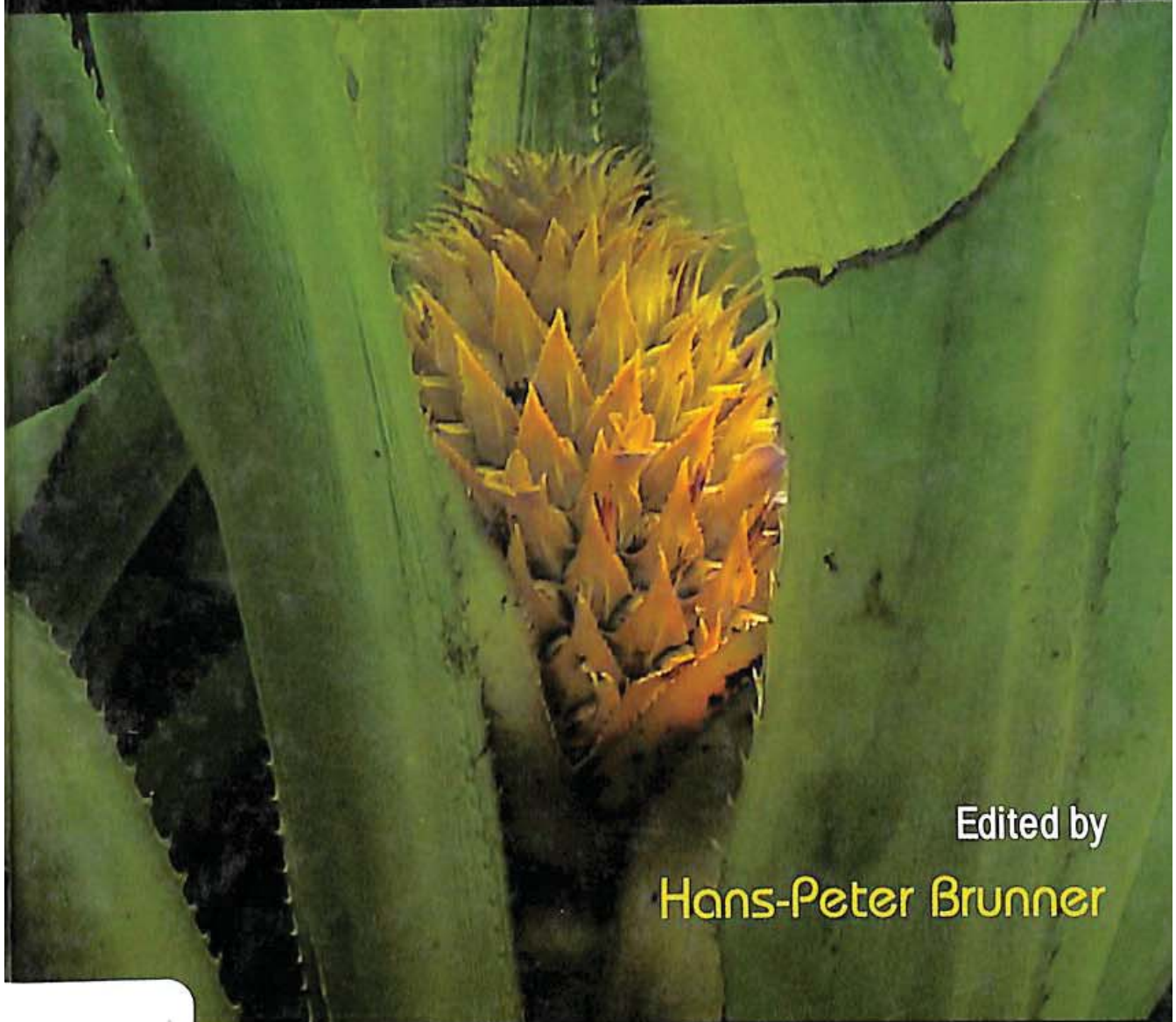


SAGE STUDIES ON INDIA'S NORTH EAST

# North East India

Local Economic Development and Global Markets



Edited by

Hans-Peter Brunner



This collection analyses the potential of the North East Indian economy, discussing ways in which it can be reconnected to the mainstream economic activities of India. Analysing the historical factors responsible for the economic failure of the North East Region (NER)—the partition in 1947, weak infrastructure, lack of technological know-how and poor access to marketing networks—it assesses the region's production scenario at present.

The chapters discuss comparative advantages of the NER economy in the competitive environment of the Indian mainland with reference to its export potential, cost of production and demand–supply relations. They also present a comprehensive data set explaining the value chain analysis on the North East map and a visual model measuring the development capacity of North East firms.

**Hans-Peter Brunner** has been working with the Asian Development Bank (ADB) since December 1995.

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**Hans-Peter Brunner**

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## List of Abbreviations

3PL	Third Party Logistics
4PL	Fourth Party Logistics
AAI	Airports Authority of India
AEZ	Agri Export Zones
ALTID	Asian Land Transport Infrastructure Development
APEC	Asia-Pacific Economic Cooperation
APEDA	Agriculture and Processed Food Products Export Development Authority
ASEAN	Association of South East Asian Nations
ASI	Annual Survey of Industries
AST_WRKR	Assets per Worker
BPO	Business Process Outsourcing
BRGF	Backward Regions Grant Fund
BRO	Border Roads Organisation
BTC	Bodoland Territorial Council
CADC	Chakma Autonomous District Council
CFCs	Common Facility Centres
CIF	Cost, Insurance and Freight
CSO	Central Statistical Organisation
DPCs	District Planning Committees
DPR	Detailed Project Report
EPZ	Export Processing Zone
EU	European Union
Exim Bank	Export-Import Bank
FOB	Freight on Board
FSC	Forest Stewardship Council
FTAs	Foreign Trade Agreements
FY	Fiscal Year
GASSET	Growth in Assets
GBI	Grassroots Business Initiative
GDP	Gross Domestic Product
GDS	Global Development Solutions

GENTP	Growth of Enterprise
GGVA	Growth in GVA
GHADC	Garo Hills Autonomous District Council
GSDP	Gross State Domestic Product
GVA_AST	Gross Value Added per Assets
GVA_ENTP	Gross Value Added per Enterprise
GVA_WRKR	Gross Value Added per Worker
GWRKR	Growth of Workers
ICD	Inland Container Depot
ICOR	Incremental Capital-Output Ratio
ICT	Information and Communication Technology
IDBI	Industrial Development Bank of India
IFAD	International Fund for Agricultural Development
IT	Information Technology
JACIK	Japan, ASEAN, China, India, Korea
JHADC	Jaintia Hills Autonomous District Council
KAAC	Karbi Anglong Autonomous Council
KHADC	Khasi Hills Autonomous District Council
LADC	Lai Autonomous District Council
LCL	less-than-container-loads
LDCs	Least Developed Countries
LMIs	Large and Medium Industries
LTL	less-than-truck-loads
MADC	Mara Autonomous District Council
MDoNER	Ministry of Development of North Eastern Region
MFA	Multi Fibre Arrangement
MT	Metric Ton
NC Hills	North Cachar Hills
NABARD	National Bank for Agriculture and Rural Development
NE	North East
NEC	North Eastern Council
NEDFi	North Eastern Development Finance Corporation Ltd
NEIIPP	North East Industrial and Investment Promotion Policy
NER	North Eastern Region
NERAMAC	North Eastern Regional Agricultural Marketing Corporation Ltd

NERCORMP	North Eastern Region Community Resource Management Project
NES	North Eastern States
NGOs	Non-government Organisations
NCHAC	North Cachar Hills Autonomous Council
NHAI	National Highway Authority of India
NHDP	National Highway Development Project
NLCPR	Non Lapsable Central Pool of Resources
NMBA	National Mission on Bamboo Application
NSDP	Net State Domestic Product
NSS	National Sample Survey
NTP	New Trade Policy
OECD	Organisation for Economic Co-operation and Development
OGAs	Other Government Agencies
PPP	Public-Private Partnership
PRC	People's Republic of China
RBI	Reserve Bank of India
SAARC	South Asian Association for Regional Co-operation
SAFTA	South Asia Free Trade Area
SARDP-NE	Special Accelerated Road Development Programme for the North Eastern Region
SEZ	Special Economic Zone
SFC	State Finance Commission
SHGs	Self-Help Groups
SIDBI	Small Industries Development Bank of India
SMEs	Small and Medium Enterprises
SSIs	Small Scale Industries
TEU	Twenty-foot Equivalent Unit
TTAADC	Tripura Tribal Areas Autonomous District Council
UNIDO	United Nations Industrial Development Organization
UT	Union Territory
VDC	Village Development Committee
WPI	Wholesale Price Index
WTO	World Trade Organisation

## Introduction: Economic Challenge Meets Trade-driven Development in India's North East Region

HANS-PETER BRUNNER

Economic historians have long been fascinated by the dynamics that let a poor region or country prosper during one period whereas other regions or countries lose their economic prosperity because they are marginalised from the streams of people, knowledge and goods that have long driven the trade relations among regions and countries. Maddison (2006, 2008) has chronicled these dynamics since 1000 AD to the present by tracing the rise and fall of regions and countries in terms of their trade and incomes. What is clear for the last millennium is that regions and countries that became centrally located in the stream of economic exchanges among peoples around the world were best conditioned to both absorb new ideas, technologies and resources, and to penetrate foreign markets with their know-how and the superior value goods they could offer. Both China and India, and especially the north eastern part of India, were central nodes in the global network of economic interactions at the beginning of the millennium, but this position was lost over the centuries. The dynamics of change and growth do tell a story on how regions and countries lose their prosperity, but also what key factors make them gain economic strength. This book focuses on the north eastern part of India within the context of the larger Indian economy. It analyses the economic conditions that prevail in that part of the country, what development potential lies hidden in the present situation and how the regions can be successfully reconnected to the mainstream of economic exchange and prosperity. The history of success is one of coordination among peoples, business and government, along service, production and information networks and supply chains.

## Economic Challenge for the North East India Region

History dealt the eastern part of British India a severe blow with the political partition of what used to be a united Bengal into what is today the country Bangladesh, and the Indian provinces of West Bengal and Assam. After political partition, ethnically distinct tribal populations and remote mountainous portions were moulded into small Indian states of their own and became apart from the old Assam. This partition of the country after 1947 broke up key trade and transport routes, and effectively landlocked the North Eastern Region (NER) of India. The post partition Chittagong seaport is located in Bangladesh, and the old Calcutta port can be reached only via a long land route around the perimeter of Bangladesh and passing through a small corridor, the so-called 'chicken-neck' which links the main territory of India with the North Eastern States (NES). Since then the NER has remained one of the most economically backward regions of India, and the Indian sub-continent. In a recent *Vision 2020* statement (Rao 2007) outlining ways forward for the NER, this situation is dubbed as 'structural retrogression'. The issue is of course, if one emphasises historical legacies as the dominant factor of retardation, that one has to come to the conclusion that many developing countries and regions find themselves in an institutional and poverty trap from which it is difficult, if not impossible, to escape. However, in the last decades a number of countries in Asia, notably India, have extricated themselves from such a development trap. This is particularly relevant for the NER, as the new Information and Communication Technology (ICT) world increasingly links remote economies to world markets, if they can put in place the necessary institutional and economic coordination and information structures.

The Indian economy, particularly the trade sector, has benefited significantly from the global trends and the simultaneous internal trade reforms pursued by the government. India's share in world exports increased marginally from about 0.7 per cent in 2001 to 1.1 per cent in 2006. India's foreign merchandise trade volume registered substantial growth at an annual average of 22 per cent for exports tripling over the five-year period and 28 per cent for imports increasing more than four-fold. India's exports of services especially in the information technology (IT)-related sectors, biotechnology, call centres and other administrative outsourcing services proved to be an engine of growth expanding by an



annual average of 34 per cent, while imports of services from abroad expanded by an annual average of 22 per cent during the same period. India's dramatic surge in its openness especially over the last five years is illustrated in Table 1.1. The ratio of merchandise exports to gross domestic product (GDP) increased from 5.8 per cent in Fiscal Year (FY) 1991 to 13.9 per cent in FY 2007, while that of imports increased from 8.8 per cent to 21.1 per cent over the same period. India's export growth (by volume) was also higher than the world average, with a surge in manufactured exports. However, within India, the development of trade value chains has not so far tapped regions like the NER or integrated it with the global economy. This has been due to the NER geography conditioning various infrastructure constraints, and political, institutional and governance issues. Vast potential from the NER has been recognised for the potential role in increasing trade activities from India.

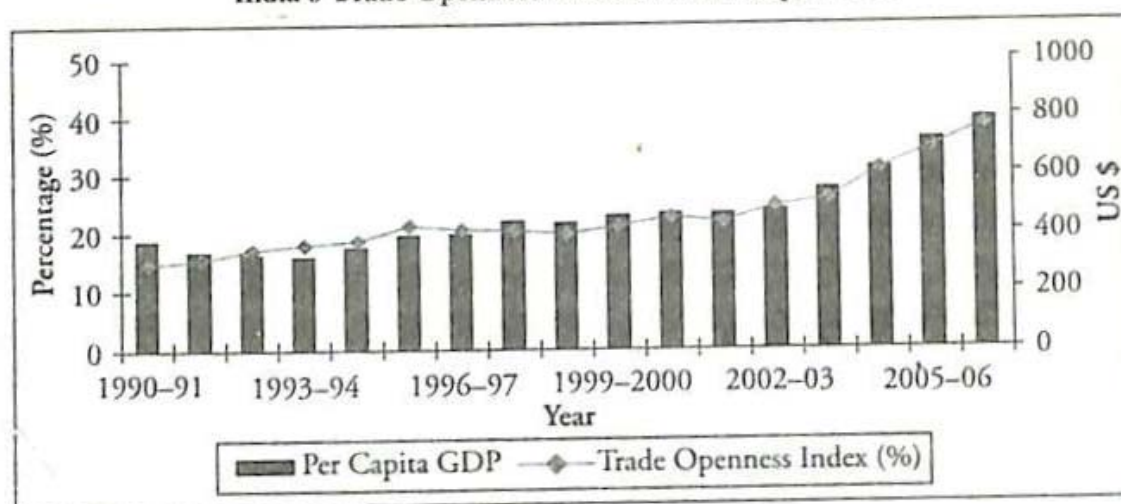
There is a strong association between the country's openness and the increase in per capita income (see Figure 1.1) pointing to the large potential of trade leading to trickle-down effects to small businesses, employment and income through linkages with the manufacturing and agro-processing value chain. Table 1.2 illustrates that the People's Republic of China's (PRC's) per capita income doubled over the 1990s while India's only increased by 10 per cent. Both countries benefited largely from a buoyant world economy since 2000 boosting per capita income by 126 per cent in the PRC and 82 per cent in India over only six years. Since FY 2000 the dollar value of labour intensive exports of agricultural produce and manufactured goods have surged at an annual 14 per cent and 24 per cent, respectively, indicating the rapid integration of rural areas and farmers as well as Small and Medium Enterprises (SMEs) in the global value chain. Experienced corporate exporters are establishing large supply networks with small businesses and farmers in rural India making trade an effective tool for poverty alleviation.

TABLE 1.1  
India's Openness to the World Economy 1990–2005  
(in per cent of GDP)

<i>Item</i>	<i>1990–91</i>	<i>1995–96</i>	<i>2000–01</i>	<i>2005–06</i>
Merchandise trade	15%	22%	23%	33%
Trade in goods and services	17%	26%	29%	45%
Gross capital transactions	12%	13%	22%	32%*

*Source:* Reserve Bank of India (2005–06: 304).

FIGURE 1.1  
India's Trade Openness Index and Per Capita GDP



Sources: Reserve Bank of India and International Monetary Fund databases, various years.

TABLE 1.2  
Gross National Income Per Capita  
(in current US\$)

Year	1990	1995	2000	2006
PRC	320	520	890	2010
India	390	330*	450	820

Sources: International Monetary Fund and World Bank statistical databases, various years.

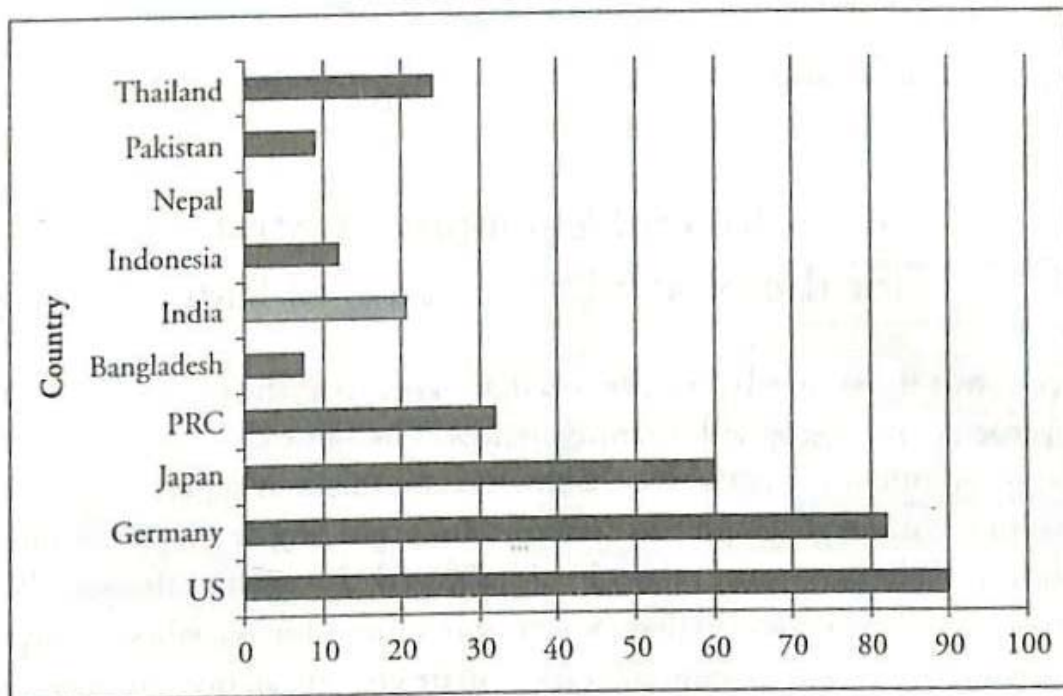
Note: \*1994 figure.

Many emerging economies have shifted their development strategies from simple export-oriented industrialisation to an emphasis on gaining access to higher value activities in global value chains. The value chain of a firm is a part of the larger system comprising a stream of activities from suppliers to buyers. Value chain activities of a firm and its interaction with other firms having horizontal or vertical inter-linkages determine its competitive advantage. In recent years there has been a growing realisation that international trade in goods and services should not be seen as a multitude of arm's-length market-based transactions. International trade is, to an increasing extent, determined by a pattern of transactions, which are neither purely market determined nor government directed. An important part of global trade is conducted within multinational enterprises or through systems of governance that link firms and the public sector together in a variety of sourcing and contracting arrangements. Further, the role of lead firms in constructing these chains is crucial as

the lead firms are predominantly located in developed countries and include not only multinational manufacturers, but also large retailers and brand-name firms. They play a significant role in specifying what is to be produced, how, and by whom. The value chain view of global economic integration highlights that for many industries access to international markets is not achieved merely through designing, making and marketing new products, but involves gaining entry into international design, production, logistics and marketing networks consisting of many different firms. The pace of technological change, the intensity of international competition, and the ongoing dispersion and interpenetration of productive activity have convinced policy-makers and entrepreneurs alike that participation in global value chains and production networks is the key to economic growth.

This also has implications on building capacities of the local economic actors for participating in the global value chains. The 'Trade Centrality Index' in Figure 1.2 illustrates an economy's positioning in global value chains and trade networks. A high trade centrality value (on a scale from 0 to 100) reflects a central position of influence within key global supply

FIGURE 1.2  
Trade Centrality Index



Source: Kali and Reyes (2006), adopted from a background paper on South Asia, prepared by the Asian Development Bank (2007) titled *Mobilizing Aid for Trade: Focus Asia and the Pacific*.

and value chains. South Asia is still relatively marginally integrated in the global value chain compared to the US, Europe and Japan. This also reflects that India has to make substantial progress even when compared to the immediate neighbour China.

Trade gateways for India and neighbouring South Asian Association for Regional Co-operation (SAARC) countries include seaports, airports and land border crossings. With the strong growth in trade, India has experienced dramatic growth in international container traffic pushing port capacities to the limit. India's container handling cost at its ports compare unfavourably with that of key competitors such as the PRC, whose costs are less than half of India's. Also Indian export goods normally require double the handling time at the port. Further, gateways between India and its neighbouring countries suffer from a significant regulatory burden associated with customs, security, and certification and cost of cross-border trade in South Asia and SAARC rank highest in the world. Improved infrastructure and logistics services of roads, ports and airports are essential to integrate India's exporters into the global value chain and improve competitiveness. This is even more applicable in the context of NER which currently lacks adequate infrastructure. Private operation of transport and logistics services has resulted in significant efficiency gains, while the public sector remains an important provider of rail and air services, and transport infrastructure and reforms to increase the turnaround of goods are gradually being introduced.

## Trade-driven Development Strategy for the North East Region of India

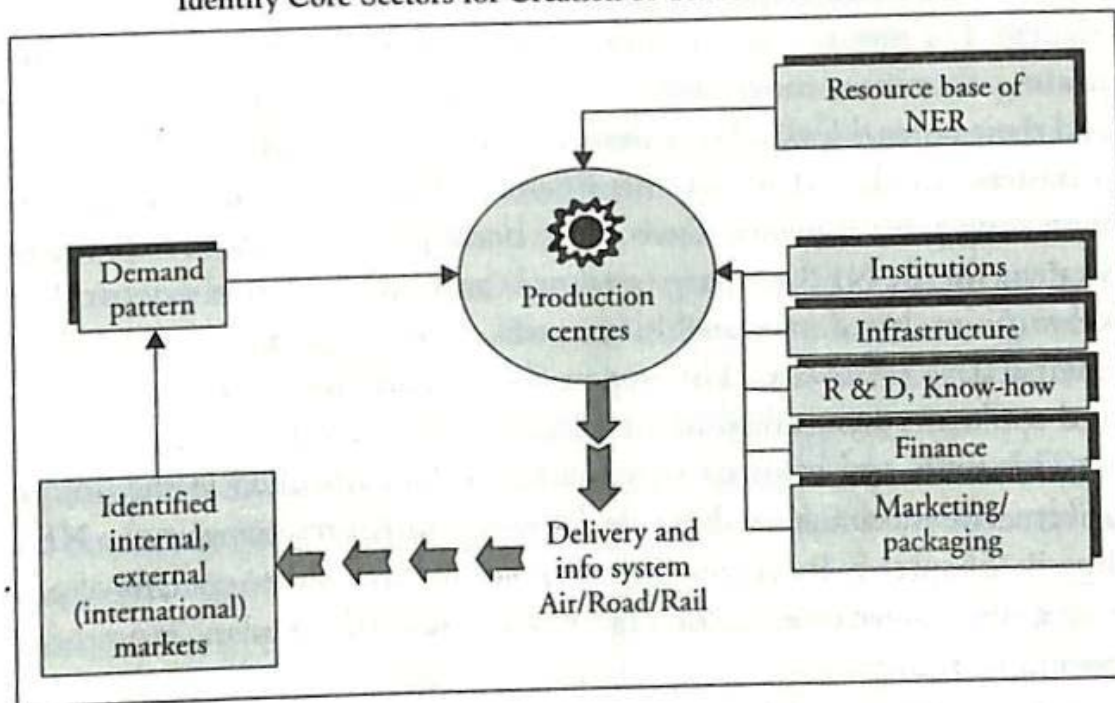
Economic development is a process that happens at the micro-level with macroeconomic geographic consequences. The value chain perspective is a very realistic way to describe the micro-economy as it captures physical, institutional and geographic structure useful in guiding development interventions. The process of micro-level structural change manifests itself in productivity increases, higher export unit values, higher worker output and wage levels, and income and export share growth, all tied to geography (Brunner and Allen 2005). The new technology-driven character of the global economy must be properly thought through with an analysis of

technological change and trade competitiveness, networks of interaction and communication, economic growth, and income disparities.

This overall logic captures well the approach for development and growth for a lagging economic region, the NES in India, as visualised in Figure 1.3. At the centre of production of exportable and competitive products and services is the firm, how it manages the business in the existing business environment and within the governance and institutional-legal environment. The quality and quantity of what is produced also and chiefly depends on the resource base of an economy, including the human resource base. Chapter 2 of the book, outlines the NER economy, the industrial base, the resources available, what is produced and where in the region relative to the location of resources. The NE economy is mapped. The structural problems, at the micro-level of the NE economies are summarised.

Chapter 3 locates the NER's economies on the international map and in relation to international markets and market niches. The NER can only catch up with the rest of India in terms of growth rates and income levels, if the region correctly identifies actual and potential comparative advantages. Comparative advantage is realised only with

FIGURE 1.3  
Identify Core Sectors for Creation of Trade and Investment



Source: Author.

skilful exploitation of the existing resource base, and with the identification of gaps in resources—resources which then need to be acquired in order to successfully fill the gaps which at present isolate the NER from global markets and demand. The NER is part and parcel of the Indian economy, and hence the chapter outlines India's current trade and national development policies. Within the Indian pattern of trade, the NER pattern of trade and competitiveness is located. This leads to the identification of NER emerging comparative advantage, and of export potential to be developed in specific market niches. To look at potential comparative advantages, and work to realise them, it is always necessary to come back to unit costs of production in the NER and all along the value chain from supply to demand, from raw materials and inputs to the final product and service delivered to the customer, relative to competitors in mainland India, the region, and the world. Data for successful benchmarking is a result of value chain analysis, undertaken product by product.

Chapter 4 by Arnold examines the role of logistics and supply chain management in the development of NER trade along value chains. The NER is constrained in the effort to expand trade by logistics infrastructure and services, by know-how and technology (R&D) concerning markets and the characteristics of final demand, access to distribution and marketing networks, and availability of investment and terms of trade finance. For government, business and donors to overcome these constraints, they must move outside their institutional silos and boundaries and their normal focus. For instance, any improvements in logistics and infrastructure should address identified bottlenecks in value chains rather than long-term capacity needs. The book promotes the development strategy for the NER where government and investors fund a network of value chains, based on available resources, market potential and emerging comparative advantage. This approach will end up constructing a hub-and-spoke model overlaying the geography of the NER.

This trade and business network has to be embedded in the unique governance mechanisms that rule the allocation of resources in the NES. Rao in Chapter 5 details the measures needed to activate systems of participatory governance in the region and undertake a planning process within its framework.

Chapter 6 looks at the business environment and industrial policies for the NER. Industrial policies provide substantial incentives for business to

locate and produce in the NER for trade advantage. A summary outline of the Indian government capital and development investment envisaged under the Eleventh Five-year Plan is given. On balance, the combination of existing Indian government and NES industrial, agriculture and trade investment and promotion programmes affords hefty advantages. Thus far, they have not proven sufficient to create a self-sustaining high-growth dynamic in the NER. A key missing link is capacity building for firms (especially SMEs) to start-up operations in terms of technology choice and business and value chain investment plans. Another restraint is the absence of good information about domestic and foreign markets. This would entail value chain analysis well beyond the capacity of NE enterprises. What is needed is catalytic financial support from the financial markets, particularly in trade finance, which would combine capacity building and financial investment with an ability to signal NER competitive advantage to lead firm investors in established global value chains. The chapter reviews the development of the financial sector in NES, and the factors that impede financial development and what can be done to overcome the obstacles.

Accelerating the NER economy to the point where it closes the economic gap with the rest of India requires a significant rise in competitiveness. In Chapter 7, evidence is presented that in the NER economic change and growth is still supply driven, largely as a consequence of the strong developmental and funding role of the government. Public services and investment drives the NE economies. However, keeping in view a vision for 2020, public sector growth is insufficient to generate the growth acceleration needed to lead to economic catch-up of the NER. Rather, demand driven growth via increased private sector productivity and competitiveness is essential. Due to the location and constrained economic base and diversification, demand driven growth has to originate in the main Indian markets outside the region and in international markets. Throughout the book, the data and economic geography base has been put together for use in an evolutionary, spatial and trade network model to be tested on the NER. The model reveals that the NER will be able to accelerate economic growth rate to the extent necessary for closing the economic gap with the rest of India. However, this requires the private sector in the lead to complete the build up of a lattice of value chain networks and business hubs across the region integrated into international value chains. Value chains need to become fully integrated from the rural

and local farm producer and entrepreneur all the way to the lead firms that ensure access and control of the lucrative markets. The value chain view of global economic integration highlights that the NER needs to pursue a productivity strategy for growth in a way that involves entry into the international design, production, logistics and marketing networks consisting of many different players.