

Chapter-3

INFRASTRUCTURE AND EXPORTS

Infrastructure and Economic Development

It is a well established fact that infrastructure is one of the key factors for a nation's economic development. According to the 'World Development Report', 1994, one percent increase in the stock of infrastructure is associated with one percent increase in Gross Domestic Product (GDP) across all countries. Further, export performance of a nation depends, among others, on two major factors; the first being competitive production capacity and the second being supporting infrastructure for exports. Adequate infrastructure is also important at production stage. Due to absence of sufficient infrastructure, shipping costs from Africa to Europe are estimated to be about 30% higher for plywood and 70% higher for tuna than those from Asia to Europe. These costs have to be borne by exporters. High transport costs, resulting from poor infrastructure, isolate countries by inhibiting their ability to participate in the global economy.

Other factors of significance for exports are availability of good infrastructural services and efficient transactional environment. For example, building good roads is not beneficial, unless it is combined with cost-efficient transport operators and time and cost saving in completing legal formalities of documentation and procedures. Under-investment in infrastructure not only undermines export competitiveness but also jeopardises the sustainability of any export boom.

Basic infrastructure can be classified into two broad categories:

- **Economic Infrastructure** consists of assets and services that have weak positive externalities, such as transport, utilities and communications. Private agents can easily provide these goods efficiently (e.g. toll roads).
- **Social Infrastructure** consists of assets and services with strong positive externalities that for political reasons are provided either

Figure: 1

Classification of Infrastructure

Infrastructure sectors			Social Infrastructure
Economic Infrastructure			
Transport	Energy & Utility	Communications	Healthcare facilities
Toll roads	Gas	Cable Networks	Education facilities
Bridges	- Distribution	Satellite systems	Social Housing
Tunnels	- Storage		Judicial and
Sea ports	Electricity		correctional facilities
Airports	- Distribution		
Rail	- Generation		
Ferries	Water		
	- Treatment		
	- Distribution		

Source: Deutsche Bank Research, November 28, 2007 (RREEF Infrastructure)

as a free or subsidised good. Examples are education and health care.

India's Infrastructure – International Comparison

'Doing Business' Report of the World Bank Group gives quantitative indicators regarding critical areas of business activity and the constraints for 178 countries of the world including India.

The Report measures regulations affecting 10 aspects of a business's life: starting a business, dealing with licenses, employing workers, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts and closing a business.

'Doing Business' Report does not give indicators in terms of Infrastructure directly. Variety of

indicators on infrastructure services normally reflect the actual scenario in terms of kilometers of paved roads, number of telephone lines, percentage of households connected to running water, etc. But indicators like these have two limits. First, since building infrastructure is expensive, the cross-country comparisons show an obvious pattern: rich countries have good infrastructure, and poor countries don't. Second, if a reformist government wants to make its mark by improving infrastructure services, it can do little to change these indicators in a short time. Heavy investment is needed. What a reformer can do is to adopt regulations that facilitate expansion in infrastructure services. 'Doing Business' theme is constructing new indicators on these two aspects of infrastructure services. The first set of indicators builds on a specific case: an unexpected rise in electricity demand in the country has created opportunities for

Table: 3.1
Ease of Doing Business in India (2008)

Starting a business (rank)	111	Closing a business (rank)	137
Procedures (number)	13	Time(days)	10
Time (days)	33	Cost (% of estate)	9
Cost (% of income per capita)	74.6	Recovery rate (cents on the dollar)	11.6
Minimum capital (% of income per capita)	0	Employing Workers (rank)	85
Enforcing contracts (rank)	177	Difficulty of hiring index (0-100)	0
Procedures (number)	45	Rigidity of hours index (0-100)	20
Time (days)	1,420	Difficulty of firing index (0-100)	70
Cost (% of claim)	39.6	Rigidity of employment index (0-100)	30
Getting Credit (rank)	36	Norwage labor cost (% of salary)	17
Strength of legal rights index (0-10)	6	Firing cost (weeks of salary)	56
Depth of credit information index (0-6)	4		
Public registry coverage (% of adults)	0		
Private bureau coverage (% of adults)	10.8		

Source: Doing Business 2008, World Bank

Figure 2

Top Reformers in 2006/07 By Indicator Set

Starting a business	Saudi Arabia
Dealing with licenses	Georgia
Employing workers	Czech Republic
Registering property	Ghana
Getting credit	Croatia
Protecting Investors	Georgia
Paying taxes	Bulgaria
Trading across borders	India
Enforcing contracts	Tonga
Closing a business	China

Source: Doing Business Database

expansion. The number of procedures for getting these services, and the associated time and cost, are recorded. The study does not compare prices of these services after the building is connected. That would involve detailed knowledge of subsidy policies, which is beyond the scope of ‘Doing Business’.

‘Doing Business’ Report of 2008 shows a lot of improvement over the earlier years in terms of doing business in India. Table 3.1 below shows different parameters of Doing Business in 2008.

Between April 2006 and June 2007, two hundred reforms in 98 economies were introduced. Reformers simplified business regulations, strengthened property rights, eased tax burdens, increased access to credit and reduced the cost of exporting and importing. Top reformers by Indicator set in 2006-07 reveal that India is in top reformers as far as trading across the borders is concerned.

India has undertaken various reforms in the field of trading across border in recent years which is reflected in figure 2. Table 3.2 gives a detailed description of the components of trading across borders like documentation, time taken, costs involved, etc. India’s rank in trading across borders is 79. There is still scope for improvement.

Among the various States of India, there are wide variations in completing the procedural formalities. The time to obtain a business license in India ranges from 159 days in Bhubaneshwar to 522 in Ranchi. The time to register property, from 35 days in Hyderabad to 155 in Calcutta. A hypothetical Indian city with the country’s top performance in each of the ‘Doing Business’ indicators would rank 55 places higher on the ease of doing business than Mumbai. The government is taking appropriate action.

Allowing creditors to enforce collateral by a court is one of the toughest reforms, opposed by both

Table: 3.2

Trading Across Borders (India)

Trading across borders (rank)	79
Documents to export (number)	8
Time to export (days)	18
Cost to export (US\$ per container)	820
Documents to import (number)	9
Time to import (days)	21
Cost to import (US\$ per container)	910

Source: Doing Business 2008, World Bank

borrowers and the judiciary. But the benefits can be great. Borrowers benefit the most. When creditors know they can enforce their collateral if a borrower defaults, they are more likely to lend in the first place.

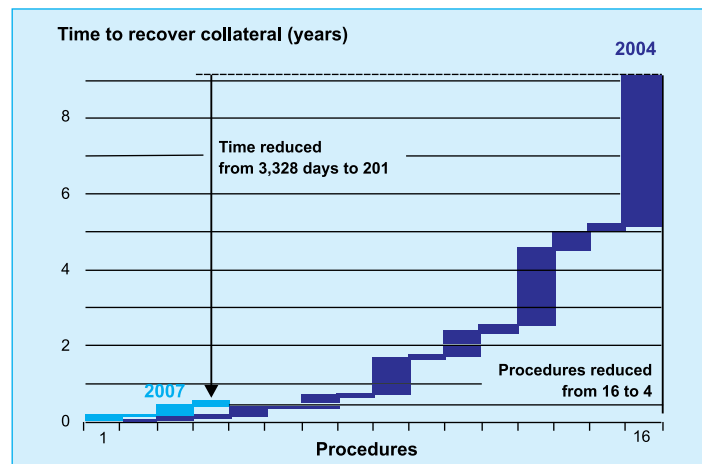
Summary proceedings are an important backstop to enforcement through courts when debtors appeal in such cases. Only two pieces of evidence need to be presented to a court in a summary proceeding: a valid security agreement and proof of default.

When India introduced summary proceedings in 2004, the time to enforce collateral fell from more than 9 years to as little as 6 months (Figure 3 & 4). ('Doing Business' 2008).

The credit bureau has been expanded to include payment histories on businesses as well as individuals. An electronic collateral registry for security rights granted by companies was also introduced.

Figure 3

Easier to recover collateral in India



Source: Doing Business Database

Figure 4

More Credit Information – The most popular reform in 2006/07

Expanded set of Information collected in credit registry
Georgia, Honduras, India, Indonesia, Kenya, Kuwait, Pakistan, Saudi Arabia, Trinidad and Tobago, Tunisia, West Bank and Gaza
Established new credit registry or bureau
Armenia, Croatia, Egypt, Russia
Revised credit Information regulations
Honduras, Kenya, South Africa
Allowed out-of-court enforcement of collateral
Ghana, Honduras, Romania, Vietnam
Established unified collateral registry
Croatia, France, India, Micronesia
Expanded range of assets that can be used as collateral
China, Croatia, Vietnam

Source: Doing Business Database

Since 2001, the World Economic Forum has been using the Growth Competitiveness Index (Growth CI) developed by Jeffrey Sachs and John McArthur to assess the competitiveness of nations. The GCI provides a holistic overview of factors that are critical to driving productivity & competitiveness and groups them into twelve pillars:

- Institutions
- Infrastructure
- Macro economy
- Health and primary education
- Higher education and training
- Market efficiency
- Labour Market Efficiency
- Finance Market Sophistication
- Technological readiness
- Market size

- Business sophistication
- Innovation

Although all the twelve pillars matter to a certain extent for all countries, the importance of each one depends on a country's particular stage of development. To take this into account, the pillars are organized into three sub indexes, each critical to a particular stage of development.

India is included in the category of factor driven stage which is GCI's first stage of development. To maintain competitiveness at this stage of development, we need a stable macroeconomic framework (pillar 1), well-functioning public and private institutions (pillar 2), appropriate infrastructure (pillar 3), and a healthy, literate workforce (pillar 4).

India, at 50th place, derives substantial advantages not only from its market size (ranked 4th for its domestic market size and 5th for its foreign market

size) but also from its strong business sophistication (ranked 27th) and innovation (ranked 32nd). The country is endowed with strong business clusters and many local suppliers, and ranks an impressive 3rd for the availability of scientists and engineers and 27th for the quality of its research institutions. (The Global Competitiveness Report 2008-09, World Economic Forum)

Status of Infrastructure in India is indicated in Figure 5. The figure shows the index of India in terms of seven indicators like Infrastructure, Shipment (International), Logistics competence, tracking and tracing, Domestic logistics cost, Timeliness and Customs on the scale of 0 to 5. The figure is

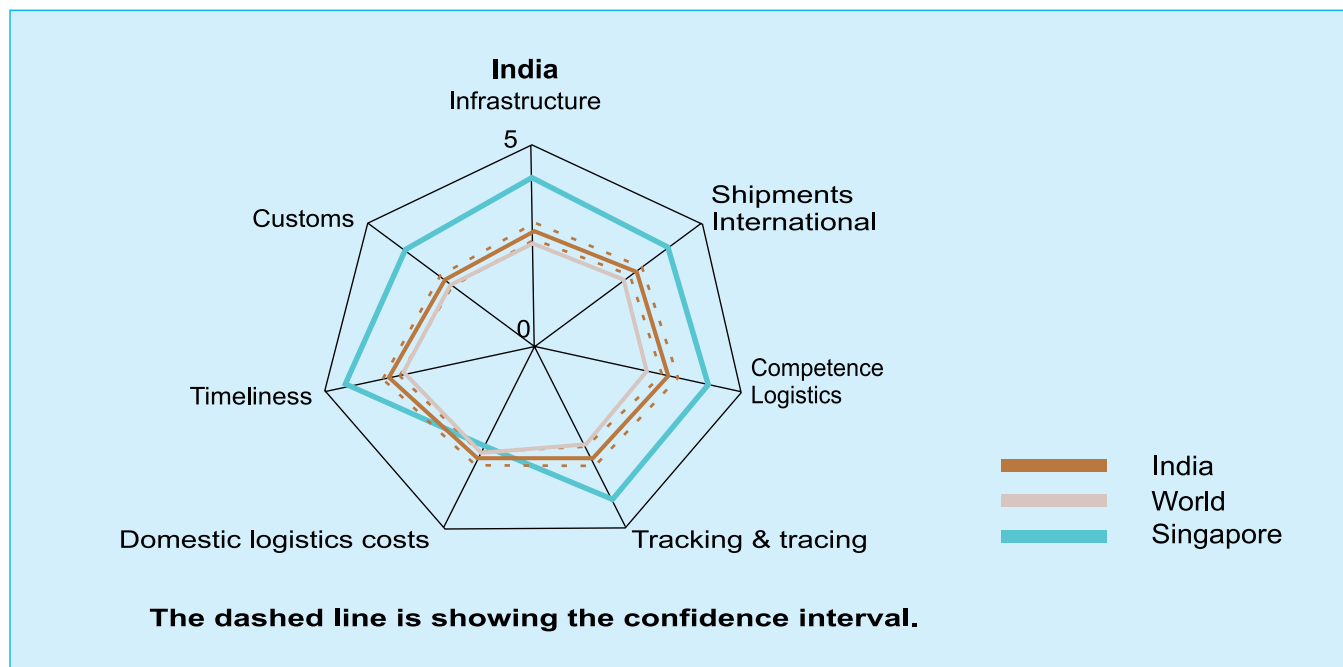
derived from the Logistic Performance Index (LPI) estimated by the World Bank. Singapore stands top in this index and Afghanistan is at the bottom (out of 150 countries). The international ranking along with categorization of all 150 countries can be seen at *Annexure 3.1*.

The above figure clearly indicates that on an average India stands midway between 0 to 5 scales. This also indicates that India is above the world average. Singapore is much ahead of India except in domestic logistic cost.

We are lagging behind the world except in domestic logistic costs as can be seen from the following table.

Figure 5

Logistics Performance of India



Source: www.worldbank.org/lpi

Table: 3.3
Top Five Performers vs. India

Country	LPI	Customs	Infra-structure	International shipments	Logistics competence	Tracking & tracing	Domestic logistics costs	Time-liness
Singapore	4.19	3.9	4.27	4.04	4.21	4.25	2.7	4.53
Netherlands	4.18	3.99	4.29	4.05	4.25	4.14	2.65	4.38
Germany	4.1	3.88	4.19	3.91	4.21	4.12	2.34	4.33
Sweden	4.08	3.85	4.11	3.9	4.06	4.15	2.44	4.43
Austria	4.06	3.83	4.06	3.97	4.13	3.97	2.24	4.44
India	3.07	2.69	2.9	3.08	3.27	3.03	3.08	3.47

Source: www.worldbank.org/lpi

Initiatives by Department of Commerce

The basic role of the Department of Commerce is to facilitate the creation of an enabling environment and infrastructure for accelerated growth of exports and international trade. In the area of improving infrastructure facilities, the main thrust of the Department is to coordinate with the other Departments and agencies for initiating required policies to improve infrastructure and remove the bottlenecks. In order to resolve the bottlenecks faced by exporters/importers on infrastructural front, Department of Commerce is taking up the matter on regular basis with the administrative Department concerned like Shipping, Road Transport & Highways, Revenue, Civil Aviation, Railways, etc. Besides coordination with the Ministries concerned, the Department is also implementing a number of programmes/schemes aiming directly at improving the existing infrastructure and creation of new facilities. The major programmes in this category are (i) Assistance to States for Developing Export Infrastructure and other Allied Activities (ASIDE) and (ii) Special Economic Zones (SEZs). Some of the important initiatives of the Department of Commerce in this regard are -

- A Core Group of Secretaries under the Chairmanship of Cabinet Secretary has been constituted to deal with the issues relating to infrastructure required for exports and imports. The Core Group shall also recommend measures for removal of critical bottlenecks in infrastructure hampering development of exports and imports and review of functioning of service providers at ports / airports / LCSs, etc. with a view to identifying procedures / systems that inhibit trade and take measures to remove them. The first meeting of the Core Group was held on 17.11.2008 under the Chairmanship of Cabinet Secretary.
- Two high level committees, viz. the Standing Committee on Promotion of Exports by Sea (SCOPE-SHIPPING) and the Standing Committee on Promotion of Exports by Air (SCOPE-AIR) are functioning under the chairmanship of the Additional Secretary (Infrastructure), Department of Commerce. The objective of these committees is to address constraints in the smooth movement of international cargo and resolve problems of exporters concerning Customs,

Containerisation, Air, Shipping & Railways related issues.

- Single Window clearance for the proposals for setting up of Inland Container Depots/ Container Freight Stations/ Air Cargo Complexes (ICDs/CFSs/ACCs) is being given through an Inter-Ministerial Committee (IMC) functioning in the Deptt. since 1992 under the Chairmanship of Additional Secretary (Infrastructure Division), Department of Commerce. During the last four years (January 2004- August 2008) 16 meetings of Inter-Ministerial Committee were held and 101 Letter of Intent (LOI) were issued for setting up ICDs/CFSs/ACCs. During 2007-08, 25 LOI were issued for setting up of ICDs/CFSs.
- Since 2002, the Department is implementing Assistance to States for Developing Export Infrastructure and other Allied Activities (ASIDE) for filling in the critical gaps in the export related infrastructure by providing necessary funds to States as well as Central agencies. During the Eleventh Five Year Plan, an outlay of Rs.3664 crore has been approved for the Scheme. As against this, total funds released during the Plan period (till date) amount to Rs 1159 crore. An outlay of Rs 570 crore has been approved for the year 2008-09. Details of the Scheme are in Chapter 5.
- Land Customs Stations are gateways for transit of goods, services and human beings between neighbouring countries. Department of Commerce has earmarked an allocation of Rs.20.00 crore under ASIDE Scheme per year for three years for the development of prioritized Land Customs Stations in the North-East Region.
- The Department oversees the programme of Special Economic Zones as a major

initiative of the Government to attract a large flow of foreign and domestic investment in infrastructure and productive capacity leading to generation of additional economic activity and creation of employment opportunities. As on 31.3.2009, 564 formal approvals have been granted for setting up of Special Economic Zones, out of which 291 SEZs have been notified and are in various stages of operation. Special Economic Zones notified under SEZ Act, 2005 have already made an investment of Rs. 98498 crore in the very short span of time since the coming into force of SEZ Act in February, 2006. SEZs in India provide direct employment to 3.78 lakh persons. The details may be seen in Chapter 6.

EDI Initiatives in DGFT

Considerable progress has been made by Directorate General of Foreign Trade in making its functioning e-compatible. Importer Exporter Code Number (IEC), which is a pre-requisite for carrying on import/export business under the FTDR Act, is communicated online by DGFT to Customs. Current automation levels permit web based electronic filing of applications at DGFT website www.dgft.gov.in for grant of incentives under the Foreign Trade Policy. Present DGFT e-filing architecture also has the facility for accepting digital signatures and electronic fund transfer. 50% concession in applicable application fee is granted on e-filing of applications.

Message exchange for Export/Import authorisations issued under Duty Exemption Scheme (DES), Duty Entitlement Passbook Scheme (DEPB) and Export Promotion Capital Goods Scheme (EPCG) is fully operational with Customs. This, in turn, facilitates faster online import and export clearances at designated EDI ports.

ANNEXURE 3.1

International Logistic Performance Index and Rank

Rank	Country ^a	LPI	Rank	Country ^b	LPI	Rank	Country ^c	LPI	Rank	Country ^d	LPI
1	Singapore	4.19	38	Czech Republic	3.13	75	Guatemala	2.53	113	Burundi	2.29
2	Netherlands	4.18	39	India	3.07	76	Kenya	2.52	114	Zimbabwe	2.29
3	Germany	4.1	40	Poland	3.04	77	Gambia, The	2.52	115	Serbia and Montenegro	2.28
4	Sweden	4.08	41	Saudi Arabia	3.02	78	Iran, Islamic Rep.	2.51	116	Guinea-Bissau	2.28
5	Austria	4.06	42	Latvia	3.02	79	Uruguay	2.51	117	Lao PDR	2.25
6	Japan	4.02	43	Indonesia	3.01	80	Honduras	2.5	118	Jamaica	2.25
7	Switzerland	4.02	44	Kuwait	2.99	81	Cambodia	2.5	119	Togo	2.25
8	Hong Kong, China	4	45	Argentina	2.98	82	Colombia	2.5	120	Madagascar	2.24
9	United Kingdom	3.99	46	Qatar	2.98	83	Uganda	2.49	121	Burkina Faso	2.24
10	Canada	3.92	47	Estonia	2.95	84	Cameroon	2.49	122	Nicaragua	2.21
11	Ireland	3.91	48	Oman	2.92	85	Comoros	2.48	123	Haiti	2.21
12	Belgium	3.89	49	Cyprus	2.92	86	Angola	2.48	124	Eritrea	2.19
13	Denmark	3.86	50	Slovak Republic	2.92	87	Bangladesh	2.47	125	Ghana	2.16
14	United States	3.84	51	Romania	2.91	88	Bosnia and Herzegovina	2.46	126	Namibia	2.16
15	Finland	3.82	52	Jordan	2.89	89	Benin	2.45	127	Somalia	2.16
16	Norway	3.81	53	Vietnam	2.89	90	Macedonia, FYR	2.43	128	Bhutan	2.16
17	Australia	3.79	54	Panama	2.89	91	Malawi	2.42	129	Uzbekistan	2.16
18	France	3.76	55	Bulgaria	2.87	92	Sri Lanka	2.4	130	Nepal	2.14
19	New Zealand	3.75	56	Mexico	2.87	93	Nigeria	2.4	131	Armenia	2.14
20	United Arab Emirates	3.73	57	Sao Tome and Principe	2.86	94	Morocco	2.38	132	Mauritius	2.13
21	Taiwan, China	3.64	58	Lithuania	2.78	95	Papua New Guinea	2.38	133	Kazakhstan	2.12
22	Italy	3.58	59	Peru	2.77	96	Dominican Republic	2.38	134	Gabon	2.1
23	Luxembourg	3.54	60	Tunisia	2.76	97	Egypt, Arab Rep.	2.37	135	Syrian Arab Republic	2.09
24	South Africa	3.53	61	Brazil	2.75	98	Lebanon	2.37	136	Mongolia	2.08
25	Korea, Rep.	3.52	62	Guinea	2.71	99	Russian Federation	2.37	137	Tanzania	2.08
26	Spain	3.52	63	Croatia	2.71	100	Zambia	2.37	138	Solomon Islands	2.08
27	Malaysia	3.48	64	Sudan	2.71	101	Senegal	2.37	139	Albania	2.08
28	Portugal	3.38	65	Philippines	2.69	102	Cote d'Ivoire	2.36	140	Algeria	2.06
29	Greece	3.36	66	El Salvador	2.66	103	Kyrgyz Republic	2.35	141	Guyana	2.05
30	China	3.32	67	Mauritania	2.63	104	Ethiopia	2.33	142	Chad	1.98
31	Thailand	3.31	68	Pakistan	2.62	105	Liberia	2.31	143	Niger	1.97
32	Chile	3.25	69	Venezuela, RB	2.62	106	Moldova	2.31	144	Sierra Leone	1.95
33	Israel	3.21	70	Ecuador	2.6	107	Bolivia	2.31	145	Djibouti	1.94
34	Turkey	3.15	71	Paraguay	2.57	108	Lesotho	2.3	146	Tajikistan	1.93
35	Hungary	3.15	72	Costa Rica	2.55	109	Mali	2.29	147	Myanmar	1.86
36	Bahrain	3.15	73	Ukraine	2.55	110	Mozambique	2.29	148	Rwanda	1.77
37	Slovenia	3.14	74	Belarus	2.53	111	Azerbaijan	2.29	149	Timor-Leste	1.71
						112	Yemen, Rep.	2.29	150	Afghanistan	1.21

Note: a-High, b-Upper middle, c-Lower middle, d-Low

Source: World Bank at www.worldbank.org/lpi