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GROWTH OF INFRASTRUCTURE IN INDIA – AN OVERVIEW



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Short Profile

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ABSTRACT:

The Twelfth Five Year Plan lays special emphasis on development of the infrastructure sector including energy, as the availability of quality infrastructure is important not only for sustaining high growth but also ensuring that the growth is inclusive. The total investment in the infrastructure sector during the Twelfth Five Year Plan, estimated at 56.3 lakh crore, will be nearly double that made during the Eleventh Five Year Plan. Their share in infrastructure investment increased from 22 per cent in the Tenth Five Year Plan to

38 per cent in the Eleventh Plan and 48 per cent during the Twelfth Five Year Plan. The present of GDP investment in infrastructure increased from 6.2 per cent in 2007-08 to about 7 per cent in 2011-12. In 12th plan aim to increase this further to 9 per cent by 2016-17. The total investment in infrastructure sector in the 12th plan estimated at 56.3 lakh cores which are roughly on 1.5 trillion US dollars. In India has become one of the fastest growing countries in the world after China and it needs to maintain the growth momentum in a sustainable manner to improve the overall standard of living and reduce poverty. The sustaining economic growth in India depends on developing quality infrastructure network all over the country. The high transaction costs arising from inadequate and inefficient infrastructure can prevent the economy maintaining the high growth rate and realizing its full growth potential in the medium and long term. The infrastructure development is at a crucial juncture in India today. The tentative steps have been taken towards amore pluralistic provisioning, especially by the

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privatesector and as a result infrastructure as a whole hasreached a point of irreversibility.

KEYWORDS

quality infrastructure , economic growth , major factorscontributing , economic development .

INTRODUCTION

The policy makers in India have reiterated time and again that improving investmentclimate in the country would drive growth by creating world class business environment.The trade and transaction cost is very crucial for the investors in a competitive andglobalised world economy and many studies have found that lack of abundant and qualityinfrastructure is one of the major reasons for high transaction cost affecting high sustainablegrowth rates. The infrastructure development, both economic and social, is one of the majordeterminants of economic growth, particularly in developing countries like India.The infrastructure development is one of the major factorscontributing to overall economic development in many ways such as (I) The direct investment oninfrastructure creates production facilities and stimulates economic activities (II) The it reducestransaction costs and trade costs improving competitiveness and (III) The it provides employmentopportunities and physical and social infrastructure to poor. In contrast, the lack of infrastructurecreates bottlenecks for sustainable growth and poverty reduction. The infrastructure investmentgenerally has two types of effects are first the demand creation effect in other economicactivities which is flow impact and it has stock impact which makes better availabilityof services and improves productivity of private sector and the economy as a whole.

India rise in recent years is a most prominent development in the world economy.The India has re-emerged as one of the fastest growing economies in the world. The Indiagrowth, particularly in manufacturing and services, has boosted the sentiments, bothwithin country and abroad. In India could unleash its full potentials provided it improves theinfrastructure facilities, which are at present not sufficient to meet the growing demandof the economy. The failing to improve the country infrastructure will slow down Indiagrowth process. Therefore, the Indian Government first priority is rising to the challengeof maintaining and managing high growth through investment in infrastructure sector among others.¹

The India to maintain the growth momentum, it is essential to strenghtentransportation infrastructure facilities such as rail, roads, port and airport connecting thedomestic economy effectively and improving overall competitiveness, thereby loweringtrade and transaction cost. The overall India and other developing countries of infrastructures are transport, telecommunication and energy are presented in Table-I

TABLE-I
INFRASTRUCTURE FACILITIES IN INDIA AND OTHER COUNTRIES

Countries	Paved Roads (Per cent of Total Roads)	Total Rail Route (_000sq.kms)	Air Freight Transport (Million For Kms)	Air Pass Transport (_000pop)	Total Telephones (Per'000 persons)	Electric Power Consumption (Kmh Per capita)
India	83.6	36.5	872.6	48.3	386	688.5
China	81.6	6.84	7692	112.41	631.37	1780.52
Singapore	100.0	--	7981.8	4578.4	1481.4	8358.25
Korea	76.82	33.69	7751	784.4	1385	7778.6
Malaysia	78.9	5.07	2597.22	713.98	713.98	3262.4
Thailand	99.17	7.89	2106.5	363.82	754	1988.1

Source:-World Development Reports, 2011.

From the Table-I shows that the India and other developing countries infrastructure facilities are fastly grown from 1991 to till today.

GROWTH OF INFRASTRUCTURE FACILITIES IN INDIA

The infrastructure facilities in Indian economy in last one and half decades has been mixed and uneven. The achievement of India infrastructure facilities in presented in Table-II.

TABLE-II
GROWTH OF INFRASTRUCTURE FACILITIES IN INDIA

Particulars	2001	2011
Electricity Generating Capacity	623 Billion KWh	923.2 Billion KWh
Railway (Total route length)	63,330 Kms	64,460 Kms
Roads	24 Lakh Kms	41 Lakh Kms
Postal	1,00,000	1,55,866
Telecommunications	76.54 Million	935.18 Million
Mobiles	35.62 Million	904.23 Million

Source: -World Development Indicators, World Bank, 2012.

From the Table-II observed the electricity generating capacity rose from 623 billion KWh in 2001 to as high as 923.2 KWh in 2011-12. The railways total route length of Indian railways at the end of March 2012 was 64,460 kms. The roads are extended from 24 lakhs kms to 41 lakh kms during 2001-2011. India has got about 14,500 kms of navigable water ways. The number of post offices increases from 1 lakh to 1,55,866 as march 2011. in telecommunication only 76.54 million subscribers in 2001 the

number increased to 935.18 million at the end December 2012. The telecommunication sector has witnessed revolution changes in recent year and Indian telecommunication network is now the second largest in the world after china. The number of mobile communication rose from 35.62 million in 2001 to as 904.23 million at the end of December 2012.

TRANSPORT INFRASTRUCTURE IN INDIA AND OTHER COUNTRIES

A comparative view of India transport infrastructure and other countries has been presented to do an international benchmarking. Transport Infrastructure in India has a share of 7.3 per cent in GDP and its demand has been accelerating over the years. The transport infrastructure in India and other countries are presented in Table-III.

TABLE-III
TRANSPORT INFRASTRUCTURE IN INDIA AND OTHER COUNTRIES

Countries	Roads			Railways		Airports		Ports
	Total Road Length (‘000’ km)	Passengers carried (Million passengers-kms)	Goods transported (Million ton-kms)	Passengers carried (Million passengers-kms)	Goods transported (Million ton-kms)	Passengers carried (Million)	Fright (Million ton-kms)	Total cargo volume (million tons)
India	3317	725100	978234	769956	521371	49.9	1233	834
China	3583	1150677	1256788	772834	2511803	191	11386	6400
Malaysia	66	-	-	2913	1350	22.42	2445	510
Korea	102	97854	12545	32025	11566	36.1	8726	786
Singapore	3.2	-	-	-	-	-	7981	515
Japan	1196	905910	346420	255865	23032	97.02	8173	378

Source:-World Development Reports, 2011.

From the Table-III shows that to analyze the importance and development of road infrastructure in the country. These include road length, passengers carried i.e. The total road length in India (in 000 kms) is comparable and almost on par with China and in fact, better than countries like Japan and Singapore, though the road length of India is one of the highest in the world, the quality of roads is really poor compared with other developing and developed countries. An important component of transport infrastructure is road transport. The road length per square kilometer of land area is known as density of roads. The road density has been increasing over the years in India. For instance road density in India stood at 714 per sq km of land area in 1991, increased to 1196 per sq. km in 2011. The road density in India is quite high. In Asia, only two countries namely Singapore and Japan have a better road density than India. However, most highways in India are narrow and congested with poor surface quality and 40 percent of Indian villages do not have access to all weather roads. The paved roads are those surfaced with crushed stone and hydrocarbon binder or bituminized agents, with concrete, or with cobblestones, as a percentage of all the country roads, measured in length. In other countries like Korea, Malaysia and Japan paved roads as a percentage of the total roads are quite high as compared to India. In Singapore, paved roads as a percentage of total roads are 100 per cent followed by Malaysia are the percentage is more than 80 per cent. The goods transported are the maximum in China followed by India. But over the years, goods transported using road network is growing much faster in India along

with china. The fast increase in freight traffic in India creates much pressure on the existing roads and thereby there is a demand for new roads.

The rail density in India is the third highest in Asia after Japan and South Korea. The railway density in China stood at 6.51 per cent in 2011 as compared to India 21.21 percent. The railways have been recording consistent growth rates in the freight and passenger traffic. The goods transported by Indian railways are the second highest in Asia after China. The number of passengers carried by Indian railways is also on par with China indicating that railways are an important source of transportation to the majority of populations. In overall, the growth of passenger and freight traffic in case of India between 1991 to 2011, substantial while rail density is at same level. Over the years growing demand has led to introduction of hundreds of new trains on the same tracks with almost same supporting logistics. This has resulted in a compromise on safety, hygiene and also overall efficiency of Indian railways.

Aviation Industry in India is one of the fastest growing aviation industries in the world. With the liberalization of the Indian aviation sector, aviation industry in India has undergone a rapid transformation but much more is desired in this important mode of transport infrastructure. Freight traffic of airways in India increased to 1233 million ton kms in 2011 as compared to only 493 million ton kms in 1991. However, countries like China, Malaysia, Russia, Japan, Korea and Singapore have a better freight million ton-kms in comparison with India. The number of passenger carried by airways in India was 49.9 million in 2011, 191 million in China and 97.02 million in Japan. This also shows that railways and road transport in the country are more popular for a majority of Indian population who belong to poor and lower middle class whereas growing middle income population has shifted to using air transport which has created both demand and supply of air services in the country.

India has an extensive coastline of 7517 km, excluding the Andaman & Nicobar Islands. Indian ports handle around 95 per cent of the total volume of country external trade and about 70 per cent in terms of value. India has 12 major ports and 200 non major ports (minor and intermediate ports) spread across nine (coastal) maritime states. Total cargo volume in million tones handled by Indian ports increased from 156 million tones in 1991 to nearly 834 million tons in 2011. In fact, the cargo handled by Indian ports is the second highest in Asia after China. The growth of cargo volume over the years is one of highest among the countries and there is growing pressure on the existing port facilities resulting in high pre-berthing and shipment turnaround time. However, port infrastructure in India is not up to international standards and India is ranked at a poor 105 in a set of countries handling port traffic. The modernization of Indian ports needs huge resources and time bound efficient management.

MAJOR ISSUES IN INFRASTRUCTURE IN INDIA

The infrastructure forms the backbone of any economy. The physical infrastructure has a direct impact on the growth and overall development of an economy. But the fast growth of the Indian economy in recent years has placed increasing stress on physical infrastructure. Therefore, the Government has accorded key priority in the 11th Five Year plan (2007-2012) and the 12th Plan period (2012-2017), with projected investment requirement of \$500 billion and \$ 1.5 trillion respectively for development of infrastructure in the country. In recent years infrastructure investment has increased and there have been overall improvements. The acceptance of a user fee and development of alternate sources of revenue have helped attract larger investments in these mega infrastructure projects and

with increasing private sector participation, delays due to project management have been reduced. The problem in recent times has been the slow implementation of infrastructure projects. Infrastructure projects face a plethora of constraints leading to long delays in implementation and quick implementation of infrastructure projects is a rarity. There are several obstacles to speedy rollouts of infrastructure projects and major constraints to executing projects include delays in financing, decision making, delay in land acquisition and environmental clearances. The Non-Governmental Organization (NGO) in India adds to the delay by holding up projects by filing writ petitions. The infrastructure demands strong planning, coordination, decentralization, private participation and commercialization of service providers rather than a top down approach which is generally followed in India. Some of the major issues for infrastructure development in India include public private partnerships, infrastructure financing, land acquisition, centre-state coordination and environmental issues are discussed in the following lines.

PUBLIC PRIVATE PARTNERSHIPS (PPPs)

The infrastructure development in India faces lot of difficulties. Though there are increasing number of Public-private partnership (PPPs) initiated in recent years in India, the PPPs have been far from satisfactory to meet the supply demand gap in infrastructure facilities. There are difficult issues for PPPs such as clear cut and stable legal framework, lack of information dissemination and guidance materials, competent institutional mechanism to prioritize investment projects, efficient mechanism for dispute resolution, well developed financial market and land acquisition. The Government is active in supporting PPPs, the position of the Government for financial support and undertaking risk limits the success of PPPs in India, particularly capital intensive transport infrastructure.

FINANCES

In India, infrastructure projects are roads, railways ports, power have traditionally been initiated, owned and managed by the state. The ability of Governments to exclusively fund infrastructure projects is increasingly being limited by resource constraints faced by Governments and the sheer scale of demand for both maintenance of existing infrastructure and provision of additional services. The Indian economy faces budgetary constraints high cost of debt servicing, increasing revenue expenditure, lower aid flows etc. As a result, Government is increasingly looking to the private sector to not only finance but also to build and operate infrastructure assets. The India needs to invest heavily in infrastructure as rapid economic growth has created increased gap between demand and supply of infrastructure facilities. According to the Global Competitiveness Report 2010-11, infrastructure in India compared unfavorably not only with developed countries but with other developing countries like China. Among the developing countries, China, Malaysia and Thailand have made remarkable progress in rebuilding economic infrastructure. The major reasons for China attracting huge amount of FDI is due to its well-developed infrastructure, particularly in the developed eastern coastal areas. The fundamental need for infrastructure development in India is to increase investment, approximately doubling the infrastructure investment than the present level. The financing infrastructure is a complex and difficult matter in India as Infrastructure projects need high initial capital cost and involves complex and varied mixture of financial and contractual arrangements.

The major constraints for financing infrastructure are (I) The limited exit options for investors and weaknesses in corporate governance (II) The non-availability of well-planned and designed number of infrastructure projects to choose (III) the interest cap and lack of deep forward foreign exchange market (IV) the lack of depth in government bond market (V) the regulatory uncertainty which increases the risk-profile of infrastructure projects and weak fiscal positions of the governments making less bankable business partners for infrastructure projects. The infrastructure projects require clearances from both the Central and State Governments, which involve many bureaucratic procedures and delay. The centre is very proactive in reforming overall policy for infrastructure development from time to time, actual implementation takes place at state level. The useful decisions are (I) to encourage every state to have a single window nodal agency for approval and clearances for infrastructure projects and (II) to have coordination between Central Government institutions and these State level nodal agencies to reduce duplication and the number of clearances.

LAND ACQUISITION

The major constraint to infrastructure development in the Country is land acquisition. The increasing pressures on land due to urbanization, rapid economic development, industrialization, increasing infrastructure requirements etc., especially in a fast growing economy like India, the acquisition of land by the Government has increased. Since a large majority of people are dependent on agriculture, acquiring land is a complex process. Moreover, people who forego their land are given poor compensation and an undervalued market price of land and therein lies the recipe for many a dispute by the affected population, thereby impacting land acquisition. The infrastructure projects in India generally also get affected and delayed due to land problems of land acquisition. The effects of displacement spill over to generations in many ways, such as loss of traditional means of employment, change of environment, disrupted community life and relationships, marginalization, a profound psychological trauma and more. Such consequences lead to the requirement of legislations that address not only the issue of compensation, but also of resettlement, rehabilitation and participation in negotiation.²

ENVIRONMENTAL ISSUES

The environmental clearances have added layers of complexity for infrastructure development. The Non-Governmental Organization (NGO) in India adds to the delay by holding up projects by filing writ petitions. The environmental clearances, infrastructure shortfalls and land acquisition problems continue to be key concerns for industry and corporate wanting to invest in infrastructure development projects. The Government realizes the need to ease environmental clearances to enable speedy implementation of infrastructure projects. For instance, it is the environment ministry which gives clearances to proponents to set up industries as well as for using forested areas to develop projects. The economic development and environmental management are complementary aspects of the same agenda and without adequate environment protection, development will be undermined and without development, environmental protection fails. Due to technological advancement multiple choices are available on the development path. The approaches to the development decision making, political commitment, and administrative ability matters. Once a project gets environmental clearance, the

environment ministry could bring insome measures which include strengthening and regulation of industry in the post-clearancestage. The social and environmental clearances are best obtained by the Government and not theprivate partner. Numerous projects have been stalled with huge time and cost overruns dueto delay in land acquisition and failing to obtain environmental clearances. The expediting theenvironmental clearances will go a long way in improving the infrastructure development inthe country.In India is provision of infrastructure services across all regions. The infrastructure development leads to increase in overall economic activities, increased productivity and higher incomes. Therefore, regional disparities in infrastructure development also lead to regional disparities in per capita income. In India, there are wide disparities in infrastructure development and also per capita income. In developing countries like India is to improve technology oncontinuous basis. One of the remarkable features of Japan infrastructure development isthe use of most sophisticated technology which provides safe and quality services. The development of technology was not equal across infrastructure services and acrossregions initially, the quality of services in recent years is almost same across all regions.

CONCLUSIONS AND SUGGESTIONS

Today infrastructure development in India is most crucial to continue high and sustainable growth. The major issues in infrastructure sector are financing, land acquisition, private sector participation, stable policy framework, institutional set up, tariff policy etc. The position of the Government to finance the expected infrastructure investment, the environment for infrastructure development through both public and private investments needs to improve through providing more stable and secure policy framework, protection of property rights and pricing and subsidy policies. The major problems in infrastructure development are the lack of proper dispute resolution mechanism. The Governments may give guarantees and other forms of support to ensure confidence and viability for infrastructure projects to attract private investment. The politically acceptable cost-recovery based pricing is very important for financial sustainability of infrastructure projects and for attracting private investment into infrastructure sector. The Government can also attract foreign investors in infrastructure sector by allowing foreign equity upto 100 per cent in almost all infrastructure sectors. The infrastructure projects are capital intensive and the ability of foreign investors to finance and mobilize resources and global expertise can expedite infrastructure investment if the policy framework and regulatory structures are appropriate in this sector. The special investment law with clarity covering infrastructure investment at state level would attract huge investment.

The major problem in infrastructure development is infrastructure financing. The Indian Government needs to look into the following aspects (I) the removing interest rate caps on External Commercial Borrowings. (II) The improve the health of the bond market (III) The relaxation on banks investments in corporate bonds (investment and regulatory guidelines for financial intermediaries which will encourage them to participate in infrastructure projects (IV) The allowing financial intermediaries to invest in reasonably rated infrastructure projects. (V) The Government needs to guarantee the use of pension funds, and insurance to invest in infrastructure projects where risk is quite high. (VI) The creating special infrastructure financial institutions which would get involved in the design and planning of the projects and also create a debt recovery tribunal to bring in confidence for large investment. The law of land acquisition needs to be revisited to accommodate

proper rehabilitation and compensation packages. The decentralized negotiation between the required bodies and land owners is the best option. The proper institutional set up for each transport infrastructure sector is necessary but there should be efforts for coordinated approach among road, railways, airports and ports so that interlinking of infrastructure services is effective and efficient. The most of the infrastructure services are built by private operators through contracts, the design of the projects, estimation of cost and time etc has to be done in scientific manner to avoid delays and cost over runs. In overall, the developed countries experience of infrastructure development has well for a country like India. The countries are at different levels of development, learning from developed and taking appropriate policy measures for developing transport infrastructure in India would be useful.

REFERENCES

- 1) Government of India, Economic Survey 2006-07, Ministry of Finance, New Delhi, 2007.
- 2) Kelly A. Dhru, Displacement Due to Land Acquisition for Development Projects in India: The Problems with the Existing Legislation and Policy, Research Foundation for Governance in India, 2009.
- 3) Government of India, Economic Survey 20010-11, Ministry of Finance, New Delhi, 2012.
- 4) World Development Report, 2011.
- 5) World Bank, World Development Report 1994, Infrastructure for development, Oxford University Press., New York, 1994.
- 6) Ahluwalia, M.S, Economic Reforms in India Since 1991: Has Gradualism Worked? Journal of Economic Perspectives, 2002.
- 7) Ranganathan. V., Challenges of Land Acquisition, EPW, May 15, 2010.
- 8) Sahoo, P and Ranjan K. Dash, Infrastructure Development and Economic Growth in India, Journal of the Asia Pacific Economy, Australia, Rutledge, Vol. 14, 2009.
- 9) Sahoo, P and Ranjan K. Dash, Economic Growth in South Asia: Role of Infrastructure, The Journal of International Trade and Economic Development, 2010.
- 10) Nataraj, G., Infrastructure Challenges in South Asia, The Role of Public-Private Partnerships, ADBI Discussion paper, Tokyo, 2007.
- 11) www.planningcommission.nic.in
- 12) Planning Commission, Government of India, Eleventh Five Year Plan Document (2007-2012), New Delhi, 2008
- 13) Shah, A., Dynamics of Public Infrastructure and Private Sector Profitability, Review of Economics and Statistics, 1992.
- 14) www.airportsindia.org.in
- 15) www.pppinindia.com

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