Is the Physical Infrastructure in Pakistan Enough to Attract Foreign Direct Investment

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1.1. Introduction

A considerable volume of literature has highlighted the importance of physical infrastructure as a determinant of economic growth. Availability of good quality physical infrastructure can surely improve the investment climate for foreign direct investment (Foreign Direct Investment) by subsidizing the cost of total investment by foreign investors and thus raising the rate of return. The favorable role of physical infrastructure in influencing the patterns of Foreign Direct Investment inflows has been corroborated by Chairman State Bank of Pakistan and by Chairman Asian Development Bank in view of its poor status in Pakistan.

Multi national enterprises (MNE's) may consider the quality of infrastructure available to be especially important while deciding to relocate export-platform, production undertaken for efficiency considerations. In other words, quality of physical infrastructure could be an important consideration for Multi National Enterprises in their location choices for Foreign Direct Investment in general and for efficiency-seeking production in particular. This study makes some explorations to analyze the role that infrastructure availability plays in determining the relative attractiveness of a country in general and Pakistan in particular for Foreign Direct Investment inflows and their export-orientation. Such an analysis may be of relevance to policy given, the strong competition among countries for Foreign Direct Investment inflows.

Governments of different countries, developed and developing alike, are competing among themselves to attract more Foreign Direct Investment inflows with a variety of investment and tax incentives and other policy preferences. A practical problem faced by empirical studies analyzing the role of infrastructure availability is that of measurement of availability of the different components of infrastructure objectively in an inter-country setting. There are many aspects of infrastructure, for instance, transportation facilities like road network, ports, airports etc., communication infrastructure covering telecommunication network; information infrastructure; energy availability, etc. However, a comprehensive indicator of infrastructure availability is not available. Therefore, this paper first develops an understanding of the availability of different aspects of physical infrastructure. Then we analyze the role of infrastructure in explaining the export-orientation of foreign affiliate production. Multi national enterprises affiliates

could be either exporting to their home countries or to third countries as a part of regional or global product mandates from their parent firms. It has been argued that these two types of export-oriented production are of a different nature.

The third-country oriented production is seen as more demanding of location factors as Multi National Enterprises aim to achieve overall efficiency and competitiveness. Hence, it is possible that infrastructure availability is more valuable to Multi National Enterprises relocating production for third-country sourcing rather than home country sourcing. The structure of the paper is as follows. Comprehensive information of infrastructure availability in Pakistan, the role of the infrastructure in explaining the relative attractiveness of countries for foreign production, Attracting Foreign Direct Investment in Infrastructure, Hypothesis Testing, Review of Foreign Direct Investment Policy, Trends, Issues, Foreign Direct Investment Risks and Economic Impact of Foreign Direct Investment, Finally, conclusions, Lessons, Policy Challenges, Policy Recommendations.

1.2. Statement of the Problem

Given its fragile balance of payments position and urgent need to boost industrial production, Pakistan needs to significantly increase its mobilization of foreign resources. However, long-term official assistance will become increasingly scarce, while promoting large portfolio investments is not a proper policy option due to Pakistan's underdeveloped Infrastructure and narrow capital market. Significant increases in commercial borrowings are also not desirable. It is therefore crucial to accord high priority to foreign direct investment (Foreign Direct Investment). Previous inflows of Foreign Direct Investment in Pakistan were meager, accounting for only 0.2% of the world total and less than one percent of the Asian subtotal each year in the 1990s. Among the major impediments are urban violence, inconsistent economic policies, underdeveloped Infrastructure, Political instability and government bureaucracy.

Remedial policy actions are essential. Another major problem is the concentration of Foreign Direct Investment in and Multi National Enterprises more attracted to the power sector, a domestic-oriented sector, which results in large foreign exchange costs and remittances. This has serious balance of payments implications. Lessons learned from the Pakistan experience are: developing economies should attach short-term priority to attracting Foreign Direct Investment to the foreign exchange earning sector, or, at least, both the foreign exchange earning sector and other sectors simultaneously. Multilateral development organizations, including the Asian Development Bank, should also take this into account in their private sector operations, particularly the build-own-transfer type, to develop economic and physical infrastructures in developing economies.

Worldwide FDI inflows declined sharply by 17.5 per cent from US$678.8 billion to US$ 559.6 billion in 2003, However, Foreign Direct Investment to developing countries witnessed a rise in the same period; it rose by approximately 9.0 percent in 2003, Foreign Direct Investment into Pakistan has been increasing in recent years, pushing up its share in global Foreign Direct Investment as well as Foreign Direct Investment flows to developing countries. However, this rise is very slow, and in absolute terms, Foreign Direct Investment inflows to Pakistan are still below US$ 1.0 billion mark, which is less than 1.0 per cent of total FDI towards developing countries.

1.3. Significance of the Study

It is widely believed that the trend towards globalize production and marketing has major implications for developing countries' attractiveness to foreign direct investment (Foreign Direct Investment). The boom of Foreign Direct Investment flows to developing countries since the early 1990s indicates that multinational enterprises have increasingly considered these host countries to be profitable investment locations.

At the same time, various experts argue that the determinants of and motivations for Foreign Direct Investment in developing countries have changed in the process of globalization. As a consequence, it would no longer be sufficient to offer just promising markets in order to induce Foreign Direct Investment inflows. Policymakers would face rather complex challenges in striving for location attractiveness to Foreign Direct Investment. It is beyond serious doubt that the rules of the game have changed in some respects. For instance, tariff-jumping Foreign Direct Investment to serve large protected markets should have become less relevant as various developing countries have liberalized their import regime and relaxed performance requirements.

Apart from unilateral liberalization, successive rounds of multilateral trade liberalization have reduced the relevance of market access through Foreign Direct Investment for many products. The recent boom of Foreign Direct Investment in developing countries is largely due to a stronger engagement of multinational enterprises in the services and manufacturing sectors of developing countries. Recent studies suggest that Foreign Direct Investment is increasingly referred to by the attractiveness of the Physical Infrastructure in the host country; quality of physical infrastructure could be an important consideration for Multi National Enterprises in their location choices for Foreign Direct Investment in general and for efficiency-seeking production in particular.

Though subjective by nature, the sources offer valuable insights on various variables on which hard data are almost impossible to come by, supplemented by more conventional sources, surprisingly little has changed so far as concerns the driving forces of Foreign Direct Investment in developing countries.

1.4. Scope/limitations of the Study

The scope of the study is to address the importance of Infrastructure availability for Foreign Direct Investment, the current status of physical Infrastructure in Pakistan (as according to latest Governmental and non-Governmental figures made public) and its impact on Foreign Direct Investment in Pakistan. The study is focusing on foreign Direct Investment from 1990 to 2004.

1.5. Delimitations of the Study

The study also addresses the Policy matters affecting foreign Direct Investment in Pakistan, and a brief look at other factors of foreign Direct Investment, another delimitation will be the attraction of Foreign direct investment in Infrastructure to develop the infrastructure of the country.

1.6. Definitions

Foreign Direct Investment (FDI): Occurs when a firm invests in facilities to produce and/or market a product in a foreign country.

Build-own-transfer(BOT): the type of Foreign direct investment where investing firm is contracted to first build the facility by its own resources then run it for agreed time and at completion of that time transfer the ownership of the facility to locals.

Portfolio investments: Investment in the Financial Instruments/Markets of a country by a foreign source.

Infrastructure: The large-scale public systems, services, and facilities of a country or region that are necessary for economic activity, including power and water supplies, public transportation, telecommunications, roads, and schools.

Multinational Enterprises: A firm that owns business operations in more than one country.

Chapter No. 2

2.1. Research Method/Design

2.2. Respondents of the Study

2.3. Research Instruments/Sources of Data

2.4. Treatment of Data/Information

2.5. Presentation of Data

2.1. Research Method/Design

The nature of the study is Analytical, Comparative, Descriptive and Exploratory. HISTORICAL RESEARCH would be conducted. Historical research is also known as desk research or analytical research.

The reason why this method of research has been selected is due to the nature of the data required, the research does include a structured questionnaire but and the main source of information is secondary with some form of primary data collected by interviews of relevant personnel belonging to the Governmental scene within Karachi. In this project report as I had to examine the importance of Foreign Direct Investment for Pakistan, the role of Infrastructure for attracting Foreign Direct Investment, policies, Impacts on Economy which require Descriptive information analysis. The reason behind conducting Historical research is as most of the data is available in Books, SBP reports on status of the economy, previous research work, News Articles, Periodicals, websites of Governmental and non-Governmental organizations.

So there is less need for conducting Survey or Observation. The analysis will also use graphs, charts, tables as to compare the status of the subject in study.

2.2. Respondents of the Study

The Individuals helped me a lot in collecting the relevant data and these individuals are as follows:

- Mr. Kausar, (SBP) OG. 1 credit department.
- Mr. Shams, Assnt. Incharge Karachi development program (D.C office Karachi)
- Mr. Sajid Rauf Hashmi, Chief Engineer (SSGC)
- Mr. Waseem Ahmed, Chief Engineer Civil works (KDA)

2.3. Research Instruments/Sources of Data

The Fact finding tool employed in Primary and Secondary data collection includes, structured, official interviews, Books, SBP reports on status of the economy, News Articles, Periodicals, websites of Governmental and non-Governmental organizations.

2.4. Treatment of Data/Information/Analysis

The data treatment will be statistical, Informative, analytical of the status of the Subject in study.

2.5. Presentation of Data

The study will be focusing on Tables, and some what on graphs, but the major part comprises of descriptive, subjective information and analysis.

Chapter No. 3

Review of Related Literature & Studies

3.1. Local Literature

3.2. Foreign Literature

3.3. Gaps to be bridged by the study

3.4. Areas for Further studies

3.1. Local Literature

1. FOREIGN DIRECT INVESTMENT IN PAKISTAN:
POLICY ISSUES AND OPERATIONAL IMPLICATIONS

Ashfaque H. Khan and Yun-Hwan Kim

July 1999.

Ashfaque H. Khan is Economic Advisor to the Minister of Finance, Government of Pakistan, and Yun-Hwan Kim is Senior Economist at the Asian Development Bank.

The study addresses the FDI status in Pakistan and different factors effecting it, when reviewing one of the factor that is Physical Infrastructure, it was reviled that these factors

are interrelated and can not be studied in isolation, same was the case of the policy matters and its implications.

2. PYHSICAL INFRASTRUCTURE PAKISTAN

Ministry of Industries & Production

Experts Advisory Cell

September 2003.

The information regarding the current status of infrastructure in Pakistan was hard to gather, this literature contributed a lot in determining the present status.

3. Ishrat Husain: Economy of Pakistan - an overview

Keynote address by Mr Ishrat Husain, Governor of the State Bank of Pakistan, at the Expo 2005

Conference, Karachi, 3 February 2005.

The literature helped in first hand knowledge about the current economic condition of Pakistan, SBP is the key evaluator of the determinants of FDI and an analysis by its head has a crucial importance.

4. State bank Annual report 2003-04

5. State bank Annual Report 2001-2002

6. State bank Annual Report 2000-2001

7. State bank Annual Report 1999-2000

All of the above reports were assessed to have the current status of FDI and the policies and steps taken to improve it, the general idea was drawn to have an understanding about the status of the economy.

3.2. Foreign Literature

1. Infrastructure Availability, Foreign Direct Investment Inflows and Their Export-orientation:

A Cross-Country Exploration

Nagesh Kumar

Research and Information System for Developing Countries.

20 November 2001

The study provided me, the concept to how to evaluate the relation between the two primary and several secondary Dimensions of the study. I obtained the concept of hypothesis development from it.

2. Kiel Institute for World Economics

Determinants of FDI in Developing Countries:

Has Globalization Changed the Rules of the Game?

By Peter Nunnenkamp

July 2002

The current international scenario of FDI and its determinants were the concern here. In this global world where a country can not remain unaffected by international changes it is important to keep it in view.

3. Attracting Foreign Direct Investment Into Infrastructure

Foreign Investment Advisory Service

The International Finance Corporation and the World Bank.

2000, On one hand where Infrastructure is a Major factor in FDI, it is also heavily depended on FDI it self, attracting FDI in infrastructure was also part of my study.

4. International Business

by Charles W.L. Hill

Fifth International edition

3.3. Gaps to be bridged by the study

I was amazed when I came to know the fact that I was unable to find any single study related to FDI by any of the previous graduates of my university. Although it's a very difficult and complicated topic but its ever increasing importance can not be overviewed, I was also unable to find any study conducted by any Pakistani Intellectual ever on the factors, determinants, issues, Dependencies, correlation, status of FDI and physical infrastructure specific to our country. There are many aspects which I had to Passover due to constraints of Time, Money, Access to information and uncooperative behavior of Govt. officials.

3.4. Areas for Further studies

Pakistan is a developing country, in its critical stage of development it needs capital and funding more often then ever of the most suitable and constructive way is FDI, Each and every aspect, factor, determinant of FDI has its own importance, so each should be reviewed separately to address its issues in more proper manner. We should also try to determine the proportion of the FDI by the different countries so as to focus more on the ones that we have not taken advantage of. It is a very vast ever changing field therefore a review should be made every year to keep ourselves updated. Therefore, future research should aim at providing a more differentiated picture, even though this will probably meet with considerable data constraints. Besides disaggregating the FDI variable, efforts should be directed at expanding the data base on non-traditional FDI determinants, in terms of country coverage and FDI policies. Comparable data for a larger sample of Variables would allow us to apply more sophisticated estimation techniques than simple correlations. Among FDI policies, FDI incentives may be particularly relevant for future research. This is for two reasons: The use of incentives has proliferated, and globalization may have made incentives a more important determinant of FDI.

Chapter No. 4
Presentation Analysis

4.1. Infrastructure Availability in Pakistan

PORTS AND SHIPPING

General

Pakistan has about 1062 km long coastline on the Arabian sea spreading from the Indian border to the Persian Gulf. At the time of partition Pakistan, the then West Pakistan had only one deep water functional port at Karachi which was not only catering for the entire sea borne cargo of Northern India but also provided transit trade facility to land locked Afghanistan. In the past, half a century of Pakistan's existence, its sea borne cargo

handling has increased tremendously and hence the need for another port was felt. This need became a necessity when Pakistan Steel Mill project was conceived in 1970s. Construction of port Qasim, the second seaport of Pakistan was started in mid seventies and completed and opened to shipping in 1990 and is in operation since then. The need of a third deep water port was felt in view of the ever-increasing volume of cargo being handled by these ports, Karachi port caters for 60 to 65 percent of foreign trade while the rest is being handled by port Qasim. The present cargo handling capacities of Qasim and Karachi ports are 17 million and 25 million tons per annum respectively. Karachi port however, suffers from congestion in the quays. Moreover, its cargo handling facilities are worn out and in dilapidated condition. **In order to address this problem, several studies were undertaken. Balochistan being the largest province of Pakistan has longer coastline on the Arabian sea starting from Rasmalan to Jiwani close to Iranian Border, thus it provides better location for the construction of the third deep water port of Pakistan.** The development of country's third deep-sea port at Gwadar has been recently initiated. The port will provide shipment facilities to China, Central Asian Republics and land locked Afghanistan. This project will not only boost development activities in Gwadar area but with the completion of Makran Coastal Highway, Gwadar project will give stimulus to economic activities and investments in the entire Makran coastal belt of Balochistan.

Karachi Port

Karachi Port is the premier port of Pakistan and is being managed through Karachi Port Trust (KPT). Karachi port handles about 75% of the entire national cargo. It is a deep natural port with 11 km long approach channel to provide safe navigation up to 75,000 tankers, modern container vessels, bulk carriers and general cargo ships. The Port has 30 dry cargo berths including two Container Terminals and 3 liquid cargo-handling berths. KPT intends to cater for 12-meter draught ships, which are the most widely used container vessels. The geographic position of Karachi Port places it in proximity to the main shipping routes. KPT has already introduced a trans-shipment package with oneway wharfage, 20-day free dwelling time and 24 hours customs facilities.

Expansion Plan

In order enhance facilities, further deepening of port has been planned. The channel is being dredged initially to 13.5 meters deep, which would be increased to 16.5 meters upto Kiamari Groyne where 16.5 meters deep berths. This would enable Karachi Port to capture new markets. KPT also plans to develop a trans-shipment terminal at Kiamari Groyne. Located at the outer tip of the harbour, the Groyne shall minimize turn around time for mother vessels. This project shall be launched on BOT basis in due course of time. The handling capacity of Karachi International Container Terminal (KICT) has been planned to increase from 300,000 TEUs to 400,000 TEUs per annum. Installation of modern facilities at Pakistan International Containers Terminal (PICT) is in progress and likely to be completed by April, 2004.

Port Qasim

Named after the great Muslim General Muhammed Bin Qasim, Port Qasim is Pakistan's first industrial and multi-purpose deep-sea port. The port has been developed on the coastal line of Arabian Sea where once the sand dunes of Bin Qasim desert could be seen. Located in Indus delta region at a distance of 50 Kilometers South East of Karachi, the port is well connected to all over the country through modern modes of transportation i.e. rail, road and has been playing an important role in the economic uplift of the country. Port Qasim offers the following facilities:

- Handling of sea-borne trade (Imports & Exports)
- Warehouse facilities
- Provision of land and infrastructure facilities for establishment of port based industrial and commercial units.

Basic Data:

Initial Capital Cost:	Rs.4.7 Billion
Total Area :	12,000 acres
Port Activities :	1,000 acres

Industrial Zone : 11,000 acres

45 Km long Navigation Channel

14 Km Railway link to National Railway network

The port has no rail-mounted cranes and the cargo is handled only by the ship cranes. Designed capacity of berths, draught actual handling at the port.

Port Qasim has attractions and advantages for investment both in port facilities and port based industrial development including the followings:

- Full range of port facilities to handle all types of general bagged break-bulk, bulk, liquid cargo and containerized cargo with backup infrastructure facilities.
- First rate multi-model connections with inland transportation network.
- Transshipment and transit facilities for trade flows with neighboring and land locked Central Asian States.
- Immense possibility for expansion and upgrading of port facilities in terms of number of berths and draught in navigational channel to meet dynamic requirement of international shipping.
- Availability of basic utilities like water, power, gas, telecommunications, banking etc, as part of infrastructure for industrial development.
- Suitability to serve as seaward terminal for inland waterways system in case techno economic feasibility of this mode of transport is established.
- Vast areas of land with direct access to water farms for setting up import based and export oriented industrial cum commercial undertakings.
- Close proximity to urban amenities at Karachi including its International Airport.
- Great potential for development of surrounding islands and creeks for tourism, marine sports and industrial developments.
- Interface between the urban and rural areas of Sindh province to draw on the mix of professional, skilled and semi skilled manpower to meet progressive requirements of production.

Facilities offered by Port Qasim

- 45 Km long navigational channel which can accommodate vessels up to 85,000

DWT class subject to adherence of the promulgated permissible dimensions.

- A dedicated Iron Ore & Coal Berth for exclusive use of Pakistan Steel Mills for handling raw material imports, it caters for 70,000 DWT class vessels subject to adherence of permissible dimensions.
- A specialized Oil Terminal offering state-of-art facilities to tankers up to 80,000 DWT subject to permissible dimensions.
- Four Multi purpose berths in a linear length of 800 meter extending port facilities upto 45,000 DWT class vessels, subject to permissible dimension and equipped with two covered transit sheds each having an area of 10,000 Sq.Ms.
- Night Navigational facilities have been introduced initially to smaller ships to be further extendable to larger size vessels.
- A dedicated two berths container terminal catering for berthing facilities to 50,000 DWT class container vessels subject to permissible dimension.
- Full range of floating craft and cargo handling equipment.
- Two Term Storage Area with storage capacity of 11,800 sq.ms. each.
- Access road to National Highway and connection to rail network
- Infrastructure facilities and utilities.
- 11,000 acres of land above high water mark in the Western and Eastern zones for industrial development.

Projects Initiated, implemented and planned

i) Night Navigation

Night Navigation has been introduced at the port since April 15, 2002. The facility marks a tangible improvement in expansion of port facilities.

ii) Construction of Two Tugs and Two Pilot Boats

PQA has entered into an agreement with Karachi Shipyard for construction of two tugs and two pilot boats at a total cost of US $ 6 million. The delivery period is 12 months from the date of first payment.

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iv) ISO 9001- 2000

PQA Operational & Technical Services are going to be ISO 9002:1994 certified by end of 2001. PQA now plans updating the new system of ISO 9001:2000.

v) Establishment of White Oil Handling Facilities at FOTCO Oil Terminal on BOT Basis

The agreement was signed with FOTCO on August, 2000 for handling of 2.8 million tons HSD oil; project was completed on 31st December 2000. Till end of December 2002, 1.85 million tons of HSD oil has been handled at this terminal.

vi) Establishment of Liquid Cargo Terminal on BOT Basis GOP has recently approved the above project to be awarded to M/s. FWO. The project is scheduled to be completed in 24 months from the date of signing of agreement.

vii) Establishment of 2nd Oil Jetty on BOT Basis at US $ 20 Million

The project is scheduled to be constructed in Private Sector by FOTCO. The proposal has been forwarded to GOP for approval.

viii) Provision of infrastructure facilities in Industrial Area. Infrastructure facilities are also being developed in PQA for provision of roads, water supply and sewerage according to phase-wise development plan.

ix) Wheat Storage Silos Facilities

As per Government's decision, wheat storage silos are being constructed by the private sector on BOO basis. The project is scheduled to be completed within 6-9 months after signing of land lease agreement.

x) Procurement Of Dredger

To undertake annual maintenance of dredging work of the navigation channel dredger, PQA plans procurement of dredger at a cost of Rs.1800 million.

Industrial and Commercial Projects

Port Qasim Authority (PQA), an ISO 9002 Certified Port in areas of Operations and technical, is committed to expand/ optimize the use of port facilities and exploitation of its potential with private sector participation for promoting growth and development in the ports and shipping sectors of the economy. Some of the major industrial and commercial projects established at Port Qasim are:

i) KESC Thermal Power Plant

Spread over an area of 223 acres of land with 1260-megawatt electricity power generation capacity, the plant has been developed at a cost of Rs. 14,000 million. The plant is operational since 1984.

ii) Toyota Automobile Plant

The plant has been developed as a joint venture between Toyota Company of Japan and House of Habibs of Pakistan. The plant has been operational since early 1993.

iii) ICI PTA Plant

Spread over an area of 150 acres with annual capacity of 0.43 million tons PTA, the plant has been completed at a cost of US$ 500 million and is functional since 1998.

iv) FJFC Fertilizer Plant

Developed as a joint venture between Fauji Foundation of Pakistan and Jordan over an area of 350 acres with a completion cost of US$ 370 million, the plant has been operational since 1998. The manufacturing capacity of the plant stands at 0.445 million tons of DAP and 0.551 million tons of urea and import of 0.4 million tons phosphate per annum.

v) Awam Palm Oil Refinery

The refinery has been established with collaboration of Awam with Singapore at a cost of US$ 20 million. The refinery has been operational since December 1993 having refining capacity of 0.2 million tons per annum.

vi) Engro Chemicals (NPK Plant)

The plant has been developed over an area of 10 acres in eastern industrial zone of PQA at a cost of US$ 560 million to produce various types of Petrochemical / Fertilizer. The plant was formally inaugurated in August 2002.

vii) Engro Asahi Polymer Plant

The facility has been developed over an area of 30 acres of land in PQA eastern industrial zone at cost of US$ 81 million to produce petrochemicals and polymers of various types and has been operational since 1999.

viii) BOC Gases Limited

Established over an area of 10 acres of land in PQA eastern industrial zone, the plant has been developed at a cost of Rs. 1,250 million producing hydrogen, nitrogen etc. The plant has been functioning since 1998.

Private Sector Involvement in Port Development

Port Qasim from the very start of business activity has sought active participation and involvement of private sector in areas both relating to port facilities and operations as well as investment in industrial and commercial zones of Port Qasim.

i) Port Related Involvement

Port Qasim pioneered the inauguration of terminal operation by private sector in the country. The entire range of cargo handling activities from opening of the batch of vessel to delivery to the consignee for imports and vice versa is carried out by Cargo Handling Companies (CHCS) / Terminal Operators under one window operation system. Some of the major Terminals established in the private sector are as under;

ii) FOTCO Oil Terminal

It is the first dedicated terminal developed in private sector on BOO basis at a cost of US$ 87 million to cater for oil imports with handling capacity of 9 million tons per annum. The Terminal has built in capacity to accommodate conveying pipes for remaining three jetties and growth potential to handle more than 36 million tons oil per annum. Currently tankers up to 63,000 tons shipload are being handled at the Terminal. The Terminal has been operational since March 1995. Additionally seventy-seven acres of land is earmarked for POL Storage Tank at FOTCO.

iii) Qasim International Container Terminal

Qasim International Container Terminal has been developed by P&G Group, Australia, through conversion of three existing multi-purpose berths with a quay length of 600 meters into two berths container terminal at a cost of US$ 35 million on BOO basis. The terminal is equipped with rail-mounted ship-to-shore gantry cranes and backup

infrastructure and equipment to handle 45,000 DWT gearless container vessels. The Terminal has been operational since August 1997.

iv) Liquid Chemical Terminal and Storage Farm

To cater for chemicals imports, the facility has been developed by Engro Pakistan in collaboration with Vopak of Netherlands on BOT basis at cost of US$ 67 million. The terminal has been equipped with storage capacity of 4 million tones per annum. The terminal has been operational since January 1998.

Future Projects

a) Establishment of 2nd Oil Jetty on BOT basis

The 2nd Oil Jetty capable of handling 75,000 DWT vessels and volume of 9.0 million tons per annum has been planned at the estimated cost of US$ 20 million for handling of white oil to be transported up country through PARCO Pipeline (a project of MP&NR) being laid from Port Qasim to Mehmood Kot near Multan. The scope of work includes financing, planning, designing, construction, operation and maintenance of 2nd oil jetty.

b) Establishment of dedicated Coal & Clinker/ Cement Terminal on BOT basis

A dedicated terminal is planned to be set up for export of clinker & cement. This terminal is to be established on the North Western side of the port at the estimated cost of US$ 20 million. Cement/Clinker export terminal will handle about 3 million tons per annum. The facility will provide a dedicated terminal for export of Clinker / Cement on non-exclusive basis thus earning valuable foreign exchange. A volume of 7 million tons per annum is estimated by the year 2010.

c) Establishment of Marine Workshop and Dry Dock Facilities on BOT basis

There is only one Shipyard (KSEW) in Pakistan where facilities exist for the dry docking & repair of ships. This is over occupied and thus considerable time is consumed in the repair of PQA crafts and foreign ships have to go to nearby countries where such facilities exist. Marine repair workshop and dry docks facilities when established will thus handle repairs of PQA'S operational crafts as well as local & foreign ships calling at the Ports (KPT & PQA). The project will be offered on BOT basis through private sector to operate and maintain the project for a period of 30 years. The estimated cost of the project is US$ 10 million.

Gwadar Port

Gwadar port is geographically located at Gwadar East Bay, about 465 Km from Karachi in the outer mouth of gulf and has immense strategic and political significance. There is three tier purpose of developing this strategic asset of the country; first, to improve the socio-economic condition of local people by opening the hitherto closed hinterland of the province, second, to develop a third alternative port that fills the missing link between the extreme south and north east of the country and third, to create the fundamental instrument of regional cooperation. Gwadar Port will serve as a regional hub in view of the recent geopolitical changes in the region.

The following potentials have been identified in the Master Plan of Gwadar Deep Sea-port Project:

- Increased trade to and from Balochistan and Iran.
- Trade potential from Central Asian countries through Afghanistan.
- Trans-shipment of cargo (liquid and dry bulk)
- Warehousing and assembly industries (EPZ)
- Oil storage, refineries, petrochemical industries etc.
- Handle the traffic to and from the ports of Sri Lanka, Bangladesh, Oman, UAE, Saudi Arabia, Qatar and Iran.

Gwadar Deep-sea Port project will be completed in two phases. Phase-I involves construction of three multipurpose berths to accommodate ships of 50,000 DWT bulk carriers. This phase is under execution since March, 2002 with Chinese assistance and is likely to be completed by end-March, 2005. Phase II of the project involves construction of more berths on BOT basis including two container berths, one bulk cargo terminal, one grain terminal with capacity handling vessels up to 100,000 DWT, one roll on/ roll off terminal, two oil piers for vessels up to 200,000 DWT and future expansion of two container berths. On completion of the project, Gwadar Deep-sea port would be the world's most strategically located port in this part of the world.

Gwadar Master Plan envisages development of about 18,600 hectares of land for this project including the followings:-

- Port Development in Phase-I & II on 400 hectares.
- An Export Processing Zone of 74 hectares located on land adjacent to the port in East Bay.
- A Special Industrial Zone of about 4,000 hectares lying to the north of the town.
- An oil refinery of 1,000 hectares located to the north east of the town, linked to the proposed oil terminal by an underground pipeline across East Bay.
- A residential area of 400 hectares stretching north of the existing town along West Bay.

To bring Gwadar close to the national mainstream, 700 Km long Makran Coastal Highway is in advanced stage of implementation. It will link Gwadar with Pasni, Ormara and Karachi. An other regional linkage is the Gwadar Ratto-Dero motorway linking it with Indus Highway through Turbat, Awaran and Khuzdar. A rail link is also planned to connect Gwadar to Quetta and Zahidan. Civil Aviation Authority also plans to upgrade the existing length of runway from 5,000 ft to 15,000 ft for operation of wide bodied jet air-crafts. The extension work will begin by end- August, 2003 and the extension facilities will be available for use by end 2004.

Gwadar Deep-Sea Project is envisioned to become a gateway to economic prosperity as it would boost trade and development activities, generate employment and help attract foreign and local investment.

Potential Projects at Gwadar Port

Gwadar being a virgin territory as far as business is concerned, a lot of business activities are possible. There are numerous businesses that offer sizeable profits for the investors in Gwadar. Few are mentioned as under:

Fish Processing	Shrimp farming, Shrimp /Lobsters
Crabs processing	Training services in Fisheries and Aquaculture

Cold storages, Ice factories	Port Management projects.
Seawater Reverse Osmosis Desalination Plants for potable purpose	Hotels Restaurants & Resorts
Business Development Service Providers	Date Processing
Oil Palm cultivation (Govt.of Balochistan can provide land on easy terms)	Canned food, Gravel Crush plant
Marine & Automobile repair	Water sports center and recreation facilities workshop
Renewable Energy; wing, solar- IPP	Cluster for Internet service providers
Clearing & Forwarding agency	Warehouses
Hospitals & Clinics	Boat building & naval architecture institute
Re-rolling Mills	Oil Storage tankers
Ferry Service for Karachi- Ormara- Pasni- Gwadar and up to Oman and Dubai	

Chart 1

Pakistan National Shipping Corporation

Pakistan National Shipping Corporation (PNSC) is the national flag carrier of Pakistan. Its main objective is to serve as an operating link between major trading partners of the country, maintain and stabilize the freight rates and provide strategic link in case of emergencies. Pakistan National Shipping Corporation operates a fleet of 14 vessels with a total dead-weight capacity of 243,749 tons. It also arranges shipments to Far East Europe and USA/ Canada on slot chartered vessels. PNSC has no bulk carriers of its own. Bulk shipments of iron ore, coal, rock phosphate, wheat, fertilizer and rice are arranged

through foreign chartered vessels. PNSC is also the major carrier of crude oil for the Country. The National Tanker Company (NTC), a subsidiary of PNSC has ensured smooth transportation of about four million tons of crude oil for the country annually at the most economical rates, resulting in large savings in foreign exchange. It owns a Tanker "JOHAR" having oil carrying capacity of about 80,000 tons. The Country's remaining oil needs are met through chartered tankers on as required basis. PNSC operates regularly through following major liner services:

Asia Line - Pakistan –Far East (Karachi, Colombo, Bangladesh, Singapore, Indonesia, Hong Kong, Taiwan, Korea and Japan etc)

America Line - Pakistan – USA-Canada – Mexico. Etc
Europe Line - Pakistan – Europe Via Gulf Countries (Italy, France, Germany, U.K. etc)

Container Service Three container vessels each having a total capacity of around 1000 TEUs including refrigerator space are employed on Singapore, Colombo, Karachi, offering weekly sailing.

Far East liner service has every fortnightly sailing. Europe liner service maintains sailing every 28 days. Where as USA/CANADA service has every 45 days sailing.

TRANSPORT AND COMMUNICATION

General

Transport and communication services are prerequisite in attaining economic growth and improving country's productive capacity. An efficient transport and communication network enhances productivity, improves efficiency and minimizes the cost of doing business. It has been widely recognized that economies with better road and

communication network are more competitive compared to those having inadequate network.

Traffic Links and Networks

Traffic links and networks are a manifestation of the human desire to live in a community and to interact with other people. Along such links/ networks, commercial and cultural activities develop and regions are connected. Traffic routes serve to transport persons and goods. They are thus a connecting link for the divisions of labor in a social, technical and economic sense and create essential prerequisites in that regard.

Economy and Transport

Transportation of goods and persons creates and secures jobs. The number of jobs dependent on a good transport infrastructure is much higher than the number of jobs directly linked to the provision of transport services. This signifies the importance of the transport infrastructure & network as well as its acceptance by the society and industry. Transport sector important for the national economy because it integrates structural changes in the distribution of human settlements and production as also practical application of important production methods and innovations. Transport thus encourages individual and social prosperity.

Transportation and Regional Cooperation

Transportation ha always been a major factor in the economic development of regions. A well-developed and integrated infrastructure network is an essential precondition of higher economic growth on a sustainable basis. Regions with adequate means of communication and transportation have grown economically and those lacking in these vital fields have historically lagged behind. For meaningful economic cooperation amongst nations, particularly in the areas of trade and tourism and for attracting foreign investment and realizing the potential gains from an outward oriented trade strategy

besides national integration, the availability of efficient transport and communications network, that too at a relatively low cost, is essential pre-requisite.

Pakistan's Geo-strategic Location

Pakistan is gifted by the nature with an excellent geo-strategic location it is at the peripheral of South Asia on one side and the Central Asia on the other. This ideal location makes Pakistan as the most attractive and shortest route for transit to the Central Asian Republics (CARs). Indian trade to that region in an economical and convenient manner is also dependent on availability of passage through Pakistan.

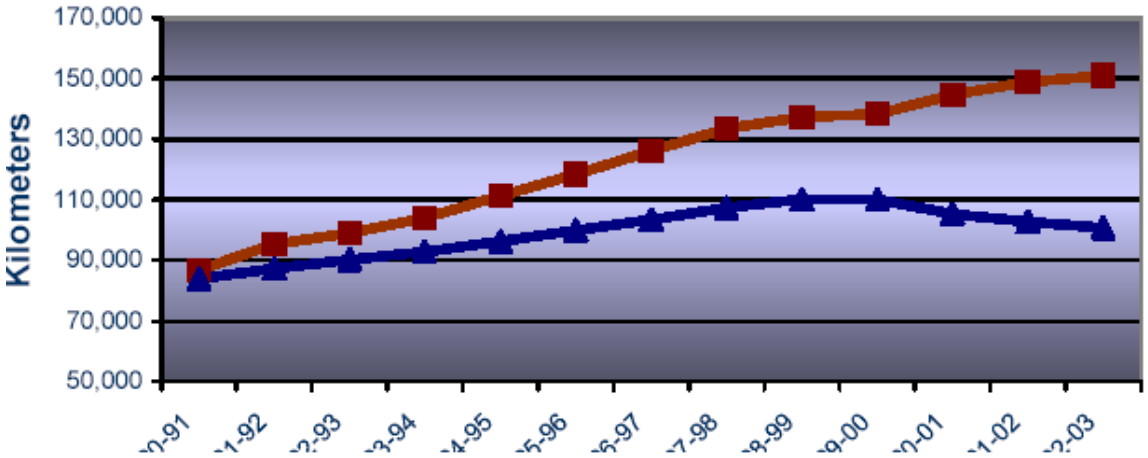
Road Transportation in Pakistan

Pakistan has an area of 803,950 square kilometers and a population of around 140 million. Pakistan, in 1947, inherited only 50,000 KMs of roads of various categories with a density of 0.06 KMs / Sq KMs areas and about 21,000 registered vehicles only. The total length of paved roads in Pakistan is now in excess of 250,000 KMs and current national average road density stands at 0.32 % KMs /Sq KMs. The transport sector accounts for about 8 % of Pakistan's GDP and is growing at 5 % annually. Roads are the most preferred mode of transportation in Pakistan carrying 92 % of passengers and goods traffic. Government of Pakistan is, therefore, endeavoring to increase the road density to 0.50 KMs / Sq KMs.

Axle Load on Motorways/ Highways

Most of the design procedures are based on 8.2 tons axle load. However, the study conducted by NTRC indicates that about 88% of trucks have more than 8.2 tons axle load. The primary reason for over loading is the dominant presence of two axle trucks i.e. 69% in the overall truck fleet presently plying on our national highways The studies have established that two axle trucks cause most of the damage to pavement structure because of load distribution on only one rear axle. The NHA has planned to establish weighing stations along Highways and Motorways to check deterioration due to heavy axle load.

A graphic representation of annual growth of roads is given below:

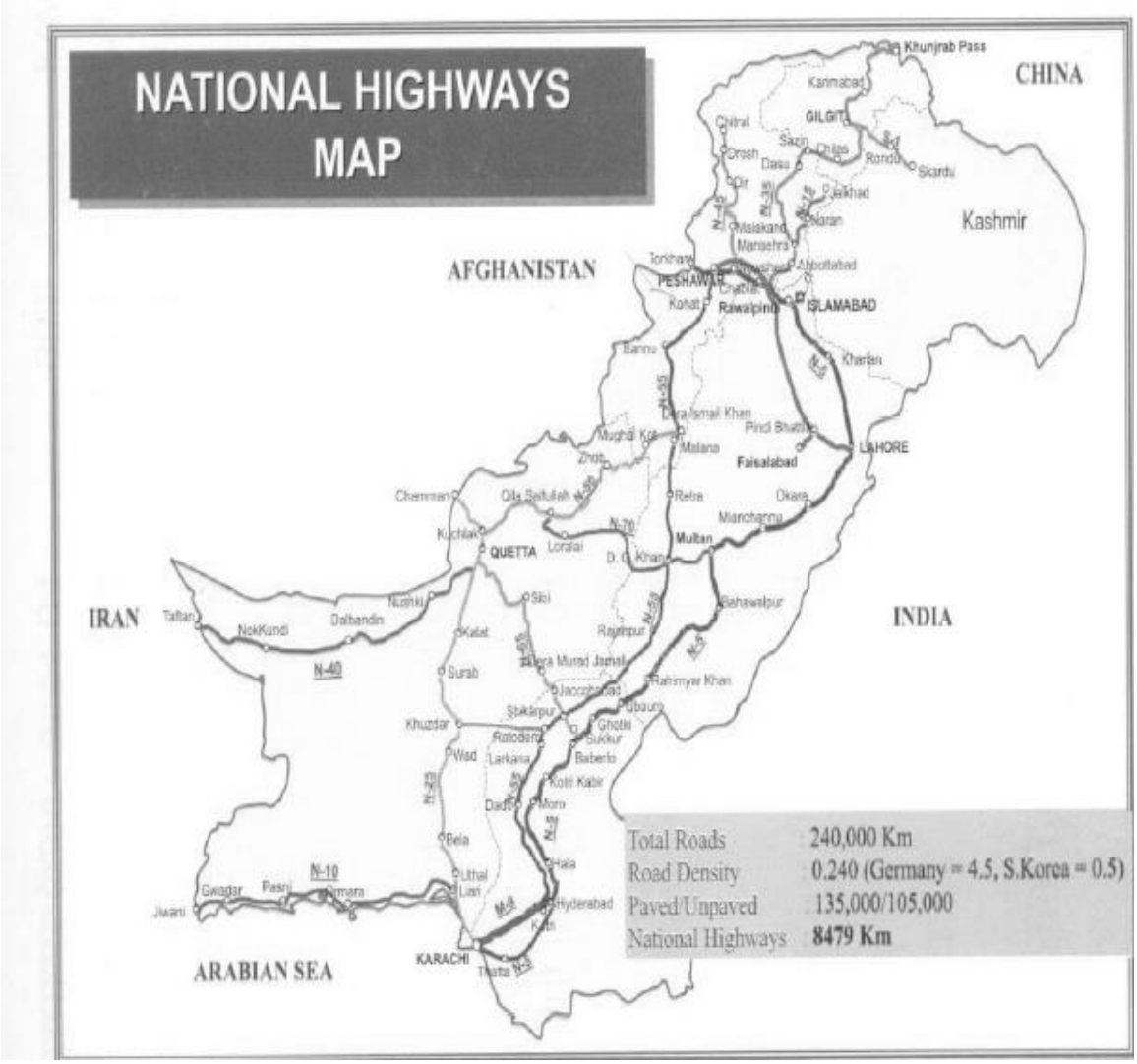


Graph 1

National Highway Authority (NHA)

Introduction

National Highway Authority (NHA) is the premier road management and regulatory agency managing 17 national highways, motorways and strategic roads. National highways network consisting of 8,845 Km is 3.5 percent of the total road length in Pakistan and carries 75 % to 85 % of the total commercial traffic. The government has decided to gradually increase the present national average road density from 0.24Km/ sq. Km areas to 0.3 Km/ sq. Km. areas.



Map 1

NHAs Existing Highway Network

NHA is currently the custodian of 17 of Pakistan's major inter provincial links called the National Highways, including the Motorways, which are access controlled tolled highways. Total length of roads, under NHA, now stands at 8845 KMs (see table). These roads account for only 3.5% of Pakistan's entire road network but cater for 80% of the commercial road traffic in the country. Obviously, the present highway network is not adequate to meet the requirements, which are growing even further at a fast pace. Improvement and extension of the existing network is, therefore, essentially to develop remote areas, better connection between the economic centers of Pakistan, inter-

provisional harmony and also cross-border transport and for personal mobility of the masses.

Eastern/Western Corridor

Pakistan is virtually bisected into two corridors by River Indus. Road infrastructure in the Eastern corridor of Pakistan, in the context of River Indus, historically experienced better economic growth and is relatively more developed. Development of communication network of the Western corridor is now the need of the hour especially from a futuristic perspective especially for the success of Gwadar Port.

NHAs Role-Success of Gwadar Port

Gwadar Port, due for commissioning in the year 2005, is of immense importance not only for trade with Central Asian Republic (CARs) but also for the development of Pakistan. Existing highways through Pakistan's border with Afghanistan at Chaman & Torkham provide the most convenient and shortest all weather links for Gwadar. Thus, because of its strategic location, Gwadar has the potential to become a hub of major economic and commercial center of the region in the very near future. However, success of Gwadar Port hinges, apart from many other aspects, on its linkage with CARs and Afghanistan besides major economic Centres of Pakistan, with highways of international standard. NHA realize this fact and has obviously a major role to play in this scenario through development and strengthening of not only Pakistan's highways communications network but also beyond Pakistan.

NHAs Development Strategy

NHA is making concerted effort to develop an efficient, safe and convenient transportation and communication network to meet the growing needs of the country. NHA is in continuous pursuit of transforming roads into expressways and consolidation of existing assets as well as providing linkages to remote and far-flung areas. NHA is adopting the following strategy in pursuit of this aim:-

- Road assets presentation through improved maintenance and up gradation with equal emphasis and care for the entire national highway network.
- Roads assets management through introduction and extension of toll culture on highways. All upgraded sections of national highways will e tolled and toll revenue will be spent on maintenance and rehabilitation of these highways.
  (Note:- Currently, NHA is generating approximately Rs.2.5 Billion per annum through toll and other revenue generating resources like leasing the Right of Way (ROW) for commercial activities. It is expected that after 3 to 4 years, NHA will not need any maintenance grant from the government).
- Development of planned economic corridor as an alternate high speed facility for north-south traffic and provision of maximum international standard linkages to Gwadar besides development of highways in remote and coastal areas.
- Completion of ongoing improvement projects and construction of additional carriageway projects on schedule.
- Improved services & safety on the highways through better maintenance enforce discipline including axle load control, removal of encroachment, policing of highways and encouraging private sector participation in the construction of highways/bridges.

BOT Concept

Realizing Government's financial constraints and in furtherance of the policy announced by the Government, NHA is currently pursuing to materialize private sector participation to augment the state resources to implement road projects through the mechanism of BOT concept. Some of the projects currently in pipeline for execution through this concept are as follows and other projects are being identified:-

- Sher Shah Bridge (N-70).
- Improvement of Karachi-Hyderabad Expressway (M-9).
- Additional Bridge at Ghazi Ghat on River Indus (N-70).
- Turnol Interchange Rawalpindi (N-5).
- Rawalpindi Bypass Project (-5).
- Shahdra Flyover (N-5).

Details of NHA Completed Projects (1999-2002)

	Highway / Project / Section	Length (Km)	Cost (Rs Million)
1.	**National Highway (N-5)**		
	Hala-Moro Project	114	551
	Moro-Kotri Kabir	78	1541
	Kotri-Kabir Baberlo	73	2029
	Baberlo-Ghotki	59	1538
	Ghotki-Ubauro	62	1454
	Ubauro-Rahimyar Khan	91	1693
	Bahawalpu-Multan	77	1535
	Multan-Mianchannu	83	2300
	Okara-Lahore	122	2736
	Bund Road Lahore	-	568.52
	Kharian-Rawalpindi	152	4229
	Chablat-Nowshera	62	1914
2.	**Karachi-Bela-Khuzdar-Kalat-Quetta-Chaman (N-25)**		
	Uthal-Bela	69	881
	Sorab-Kalat	74	716
3.	**Hasanabdal-Abbottabad-Thakot-Gilgit-Khunjerab (N-35)**		
	Improvement of KKH	30	5126
4.	**Lakpass-Nokundi-Taftan (N-40)**		
	Dalbandin-Noukundi	94	1133
5.	**Indus Highway (N-55)**		
	Kotri-Manjhnand	59	1162
	Manjhnand-Sehwan	75	1081

Table 1

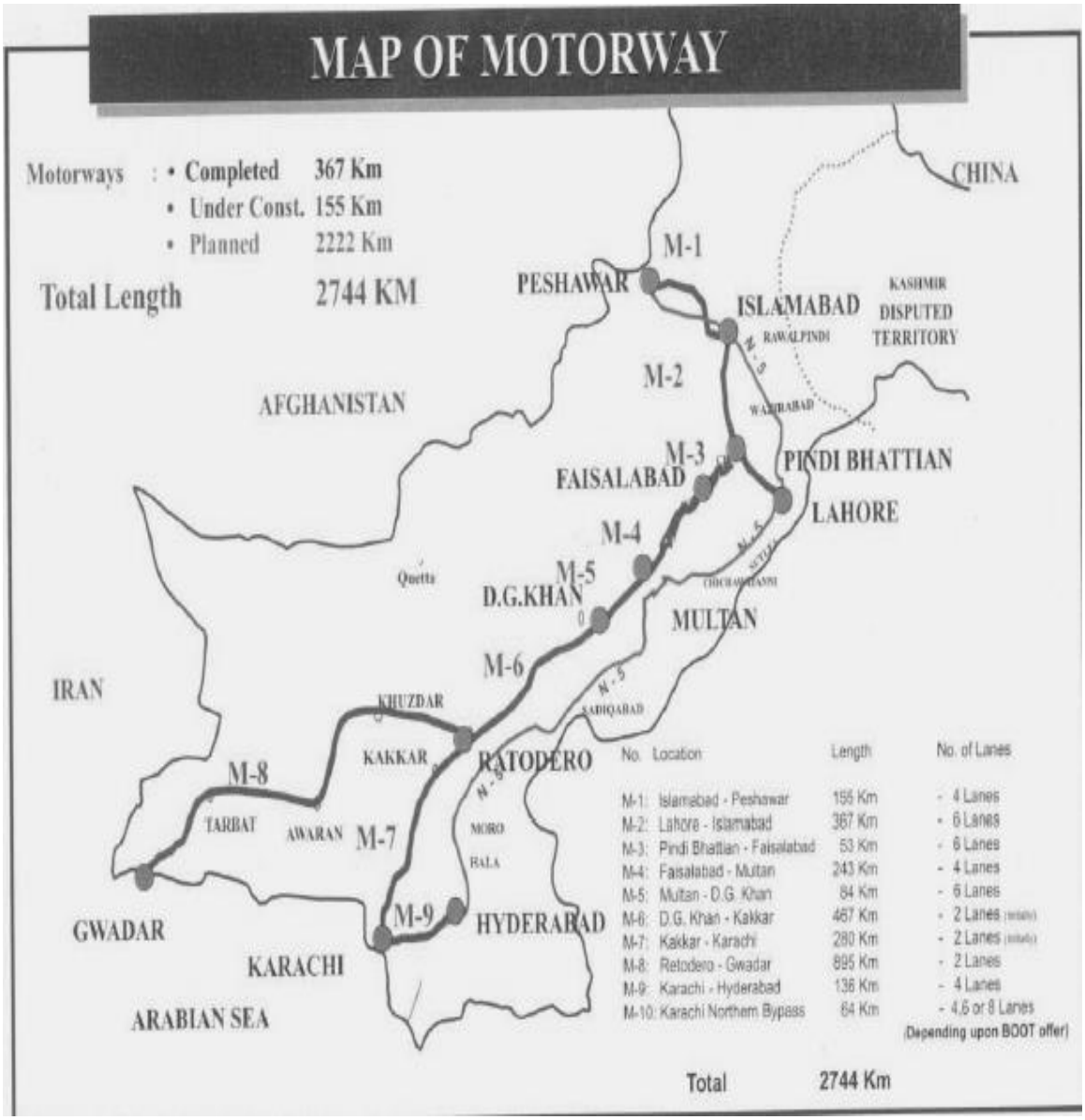
	Highway / Project / Section	Length (Km)	Cost (Rs Million)
	Ratodero-Ghauspur	99	1203
	Shorinullah-Rajanpur	95	1437
	DG Khan-Retra Junction	108	1569
	Retra-Malana Junctions	98	1272
	4 CRBC Bridges	-	257
	Sarai Gambila-Karak	59	1160
	Karak-Karappa Chowk	34	1334
	Karappa Chowk – Badabher	54	531
	Kohat Tunnel & Access Roads	31	5585
6.	**Islamabad-Satra Mile-Lower Topa (Murree)-Kohala (N-75)**		
	Barakaha-Satra Mile	5	90
7.	**Gwadar-Ratodero (M-8)**		
	Shahdadkot-Khuzdar	35	460
	Ratodero-Shahdadkot-Quba Saeed Khan	19	569
8.	**Other Projects**		
	Sukkur Bridge	-	1500
	Chiniot Bridge	-	400
	Barian-Nathiagali-Abbottabad	58	1500
	Tall-Parachinar	75	418

Details of NHAs Major Ongoing Projects

	Highway / Project / Section	Length (Km)	Cost (Rs Million)
1.	**National Highway (N-5)**		
	Rahim Yar Khan – Tarinda Muhammad Panah	80	3261
	Tarinda Muhammad Panah Bahawalpur	90	2681
	Baberlo – Pano Aquil	30	221
	Taxila-Turnol	10	144
	Multan-Sahiwal	50	387
	Sahiwal-Lahore	40	327
	New Bridge on River Sutlej	-	208
2	**Makran Coastal Highway (N-10)**		
	Lyari-Ormara	248	3906
	Ormara-Pasni	153	2146
	Pasni-Gwadar	133	2889
3.	**Lyari Expressway**	32	5126
4.	**Mansehra-Naran-Jhalkhad-Chillas Road (N-15)**		
	Mansehra-Naran-Jhalkhad	172	4110
5.	**Kuchlac-Zhob-DI Khan Road (N-50)**		

	DI Khan-Mughalkot	124	1307
6.	**Sukkur-Sibi-Quetta (N-65)**		
	Dera Allah Yar-Nuttal	60	729
	Nuttal-Sibi	81	717
7.	**Qilasaifullah-Loralai-DG Khan-Multan Road (N-70)**		
	Khajuri-Bewata	68	897
8.	**Islamabad-Satra Mile-Lower Topa (Murree)-Kohala (N-75)**		
	Satra Mile-Lower Topa (Murree)	43	2400
9.	**Motorways**		
	Peshawar-Islamabad (M-1)	152	11870
	Pindi Bhattian-Faisalabad (M-3)	52	5636
	Karachi Northern Bypass (M-11)	57	2221

Table 2



Map 2

Details of NHAs Planned Projects (10 Years)

	Highway / Project / Section	Length (Km)	Cost (Rs Million)
1.	**National Highway (N-5)**		
	4-Lane Overhead Bridge Kotri	-	80
	Hyderabad-Hala	48	879
	Hala-Chanesar Bridge	40	650
	Chanesar Bridge-Moro	39	638
	Moro-Ranipur	89	1505
	Ubauro-Sheikh Wahan	54	1097
	Mianchannu-Sahiwal	46	867
	Mianchannu-Sahiwal-Okara	72	731
	Sahiwal-Okara	30	442
	Lahore-Gujranwala	100	2479
	Gujranwala-Kharian	106	790
	Kharian-Rawalpindi	60	432
	Turnol-Chablat	57	812
	Flyover at Nowshera	-	400
	Nowshera-Peshawar	68	695
	Peshawar-Torkham	46	3335
2.	**Mansehra-Naran-Jhalkhad (N-15)**		
	Jhalkhad-Chillas	74	1200
3.	**RCD Highway (N-25)**		
	Quetta-Chaman	117	2268
	Bela-Kararo-Wad	136	1655
	Lalat-Quetta	130	2190
4.	**KKH (N-35)**		
	Realignment at Tatta Pani Plus Bridge over River Indus	-	300
5.	**Lakpass-Nokundi-Taftan (N-40)**		
	Dalbandin-Noukundi	94	2760
6.	**Nowshera-Dir-Chitral (N-45)**		
	Lowari Tunnel & Access Roads	40	6000
7.	**Indus Highway (N-55)**		
	Sehwan-Khairpur	98	2846
	Khairpur-Ratodero	101	3208
	Rajanpur-DG Khan	109	3183
	Rajanpur-DI Khan (Malana)	108	3183
	Malana Junction-Sarae Gambila	117	3084
	Badabher-Dera Adam Khel	29	656
8.	**Sukkur-Sibi- (N-65)**		
	Jacobabad-Dera Allahyar	27	495
	Sibi-Quetta	148	2000
	Sibi-Nari Bank River	30	1000
	Jacobabad Bypass-Shikarpur	42	700
9.	**Qilasaifullah-Loralai-DG Khan-Multan Road (N-70)**		
	Bewata-DG Khan	92	500

	Highway / Project / Section	Length (Km)	Cost (Rs Million)
10.	**Motorways**		
	Faisalabad-Multan (M-4)	243	20000
	Multan-DG Khan (M-5)	84	8000
11.	**Gwadar-Khuzdar Motorway (M-8)**		
	Gwadar-Turbat	164	3778
	Turbat-Hoshab	76	1850
	Hoshab-Awaran	158	3184
	Awaran-Khuzdar	251	6312
	Khori-Quba Saeed Khan (M-8)	143	4000
	Karachi-Hyderabad (M-9)	136	20000
	Karachi-Hyderabad Superhighway	48	547
12.	**Other Projects**		
	Five bridges on KKH-Shangrila-Skardu (S-1)	-	200
	Larkana Bridge (N-5/N-55 Link)	-	2108
	Thatta-Badin-Nagarparkar (Sindh Coastal Highway)	350	3000

Table 3

Road distance between major cities of Pakistan

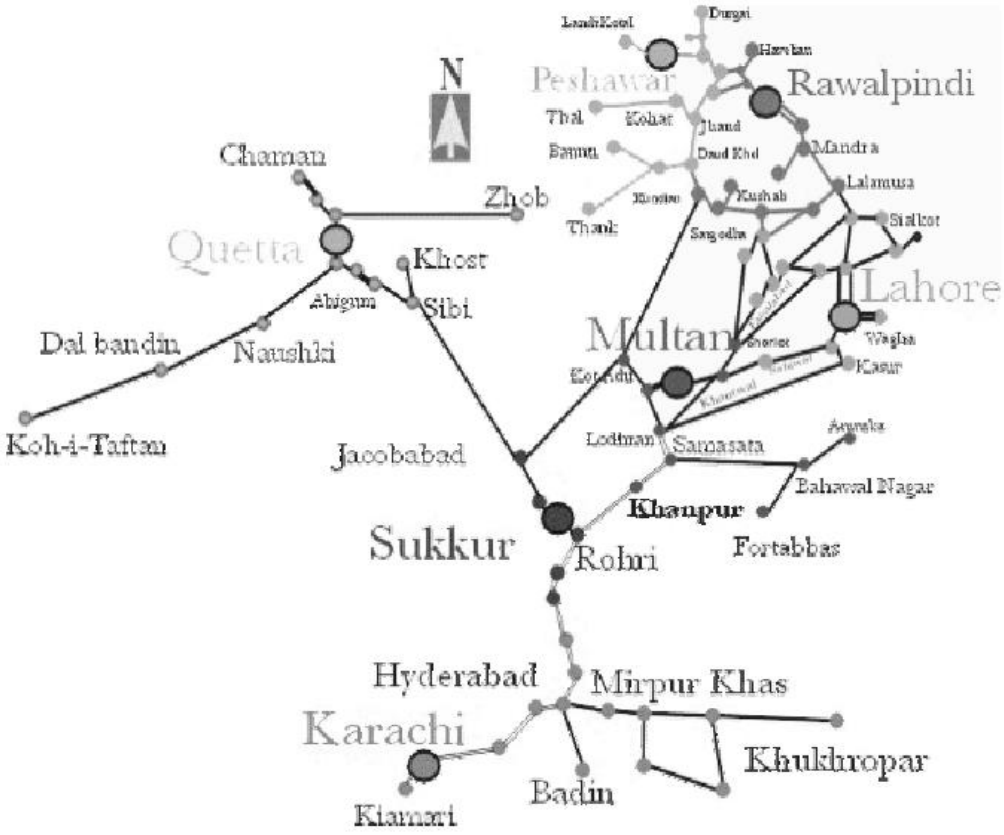
	Hyderabad	Sukkur	Bahawalpur	Multan	Lahore	Islamabad	Peshawar	Chitral	Gilgit	Saidu	D.I.Khan	Larkana	Quetta	Turbat
Karachi Miles	108	305	528	587	802	981	1078	1211	1322	1125	774	302	444	369
Km	175	491	851	945	1292	1580	1735	1949	2129	1811	1249	486	715	595
Sukkur Miles	195		224	282	497	676	773	905	1017	820	469	65	252	675
Km	315		360	454	801	1088	1244	1458	1638	1320	756	105	406	1086
Lahore Miles	694	497	274	238		179	838	408	521	322	255	563	750	1173
KM	1117	801	441	384		288	1349	657	838	518	410	906	1207	1888
Quetta Miles	448	252	476	534	750	925	1025	1158	1270	134	722	265		590
Km	721	406	766	859	1207	1489	1650	1864	2044	216	1162	426		950
Multan Miles	478	282	58		216	395	491	624	736	538	188	346	534	957
Km	769	454	93		348	636	790	1004	1184	866	303	558	859	1540
Islamabad Mil	873	676	453	209	179		108	241	353	159	240	742	925	1351
Km	1405	1088	729	336	388		174	388	568	256	386	1194	1489	2174

Table 4

Pakistan Railways

Pakistan Railways provides an important mode of transportation in the public sector spreading over the entire country. It contributes to the country's economic development by catering to the needs of large-scale movement of freight as well as passenger traffic and is a major source of promoting integration among the masses of four provinces. Pakistan Railways provides transport facility to over 70 million people and handles freight above 6 million tons annually. The government has approved a rehabilitation 5 years (2001-06) plan for Pakistan Railways at the cost of Rs.40 billion, which is a part of 10-year perspective plan (2001- 10) announced by the government. An allocation of Rs.105 billion has been made for the Railways for the 10 years perspective plan to rehabilitate and modernize the infrastructure, rolling stock and signaling and telecommunication facilities over the Railways network. The major projects include procurement /manufacturing of 169 diesel engines, 575 passenger coaches, 1600 high capacity wagons (for container shifting up to 60 tons), rehabilitation of 136 locomotives, doubling of track from Lodhran to Peshawar and Lahore to Faisalabad. The present rail system comprises 781 stations and 45 halts. Rolling stock includes about 559 locomotives, 4,250 passenger coaches and 24,132 freight cars.

Railway Network



Map 3

Track Kilometers

The Pakistan Railways has a total of 11,515 track kilometers (including track on double line, yard and sidings) at the end of 2001-02. This consists of 10,960 kilometers of broad-gauge and 555 kilometers of meter gauge.

Double line track and Electrified track

Double line track consists of 1,043 kilometers and Electrified Track consists of 554 km's as tabled below: -

From	To	From	To	Length (Kms)
Kiamari	Lodhran	0.00	843	843
Sher Shah	Multan	72	87	15
Raiwind	Shahdara Bagh	1,180	1,226	46
Lahore	Wahgah	00.0	23	23
Chak Lala	Golra Sharif	1,503	1,522	19
Ab-i-Gum	Kolpur	306	343	37
Gulistan	Chaman	466	526	60
				1,043

Electrified Sections		**Route Kms**	**Track Kms**
Lahore	Khanewal	285.46	521.22
Lahore-Mughalpura	Lahore- Cantt.	7.60	22.78
		293.06	**544.00**

Table 5

Railway Track Distance between Cities

Main Line		Branch Lines		
Karachi (Kiamari) To	Distance (Km)	From	To	Distance (Km)
Karachi Cantt.	09	Sukkur	Jacobabad	84
Hyderabad	183	"	Sibi	240
Tando Adam	237	"	Quetta	381
Nawabshah	297	"	Bostan	414
Rohri	480	"	Chaman	523
Khanpur	692	Khanewal	Shorkot Cantt.	63
Dera Nawab Sahib	780	"	Faisalabad	170
Samasata	815	Lahore	Faisalabad	142
Sher Shah	915			
Multan Cantt.	930			
Sahiwal	1053			
Raiwind	1179			1
Lahore	1219			
Gujranwala	1289			
Wazirabad	1319			
Jhelum	1385			
Rawalpindi	1512			
Nowshera	1642			
Peshawar City	1681			

Table 6

Tons of Freight Carried

Total freight carried by Pakistan Railways during 2001-02 was 5,866,226 tons and 4,572,442 tons-kilometer averaging 782.6 kilometers traveled by a ton. Average rate is Rs.1.02 per ton per KM.

Year wise figures are given below.

(000 Tons)

Year	Public Goods	Departmental	Total
1998-99	4,869	579	5,448
1999-00	4,193	577	4,770
2000-01	4,942	952	5,894
2001-02	4,909	957	5,886

Table 7

Telecommunications

Pakistan Telecommunication Company Limited (PTCL)

PTCL network consists of 99 percent digital switching system exchanges, Optical Fiber Cable Backhoe, subsidiaries routes, long distance media, digital radio systems, satellite communications and alternate arrangements. It has international Gateway exchanges at Karachi and Islamabad. The PTCL is provider of infrastructure for connectivity for Internet services Providers (ISP's), data network operators, software exporters, educational institutions, universities, corporate customers and other users. Its tariffs were reduced by 25 percent on international calls during 2001-02 and are expected to be reduced further in 2002-03. Tariff has also been reduced by 60 percent on international IP bandwidth, 10 to 68 percent on lower than one MB, and 70 percent on domestic lease circuits. For promotion of Information Technology, 1,350 cities/towns/villages have been provided with Internet facility, up to March 2003, compared to 850 cities/towns/villages in June 2002 showing an increase of 58.8 percent. Promotional traffic has been introduced for ISPs, Software exporters and educational institutions/universities working in the country. During 2000 – 01, the PTCL has launched its domestic and International Pre-Paid Calling Card Service (Intelligent Network) in the country. Since its commissioning, the intelligent network system at Islamabad, Lahore and Karachi has met with tremendous success. So far 9.73 million cards have been floated in the market. Pakistan Telecommunication network is expanding each year, thus providing telephone access to rural and urban communities in record time. Total telephone lines installed by

March 2003 were 4.6 million as against 3.6 million up to June 2002 last year, showing an increase of one million telephone connections or 27.8 percent. A system with a capacity of 110,000 Mail Boxes has been installed at 10 major cities like Faisalabad, Gujranwala, Hyderabad, Islamabad, Karachi, Lahore, Multan, Peshawar, Quetta and Sialkot. The Mobile Phone Service (Ufone) has been launched in 60 cities/ towns and highways. Its customer base is 425,978, which is expected to increase further in future. Paknet, an Internet Service provider (ISP), is a subsidiary of the PTCL. The PTCL has installed Internet Exchanges (PIE) at Rawalpindi, Lahore and Karachi, comprising of high-end routers, multi-services switches, firewalls and proxy services etc. The details of bandwidth with capacity and total number of ISPs are given in table below.

Bandwidth Capacity

Name of station	Bandwidth capacity Mega byte	Total number of ISPs
Karachi	94.65	81
Lahore	70.62	60
Rawalpindi	63.29	66
Total	**228.56**	**207**

Table 8

Pakistan Telecommunication Authority (PTA)

Pakistan Telecommunication Authority being a regulatory body is promoting the telecom sector since 1997. The Authority is responsible for regulating the establishment, operation and maintenance of telecommunication system and provision of telecom services in the country. It promotes and protects the interest of end users of telecommunication services. Pakistan under World Trade Organization (WTO) commitment is now ready to deregulate the whole of telecom sector. Deregulation policy is in final stages and will be announced shortly. In the year 2002-03, the PTA has stepped forward to encourage the telecom operators and transfer of technology in Pakistan. In this regard, royalty of Internet Services Provider (ISP) has been reduced from 4 to 0.66 percent of the annual gross revenue. For card payphone service and cellular mobile service, it was reduced from 4 to 2 percent and 1.5 percent respectively of gross revenue

in the year 2001. Similarly with the launching of prepaid connections by cellular companies, the numbers of mobile phones subscribers have reached to 2.5 million by end of June 2003 as against 1.2 million up to June 2002, showing a growth of 105.8 percent. The introduction of new services in terms of technology advancement in the sector include broadband Internet services, General Packet Radio Services (GPRS) facility, and Internet connectivity on the mobile phone. The PTA has issued 1,278 radio-based licenses and granted permission to install 291 Spread Spectrum Radio lines. For the value added services, Pakistan Telecommunication Authority has issued total 431 licenses including 177 licenses for card payphone services and 121 for electronic information service. For voice and data network services, 24 and satellite 8, trunk radio services 12, store and forward fax service 9, video conference 1 and 25 data communication network services license were issued up till June 2003.

National Telecommunication Corporation

National Telecommunication Corporation (NTC) has an installed capacity of 78,000 lines with 60,000 working connections. The Corporation plans to expand the network to 100,000 lines during 2003-04, which will provide a total number of 80,000 working connections. All NTC exchanges are digital, which are linked to each other through Optical Fiber (OF) media and digital radio system (DRS).

The corporation is also in the process of establishing Optical Fiber backbone on Makran Coast to bring the people of the area into the mainstream of national development. The corporation will set up its own gateway exchanges to provide international connectivity to its designated customers during 2003-04 and will introduce/provide calling cards for exclusive use by its customers. It will also set up pay card phones at the premises of its designated customers. NTC's state-of-the-art Data Communication Network has started to provide infrastructure support for e-governance, initiated by the government during 2002-03, which is in the process of expansion, and provision of Internet facilities to federal ministers and their regional offices. In December 2002, allocate spatial slot of 38$_0$, the PAKSAT was placed at the telecom services of the country through satellite.

During the year 2003-04, an estimated 1000 designated subscribers of NTC will be covered through wireless local loop. Network management system is responsible for the

management on real time basis of the exchanges and the surrounding network. Network manager reduces the negative effects of over load & faults in the network through efficient utilization of network resources and capacity.

Pakistan Postal Services

General

Pakistan Post Office is a state enterprise dedicated to providing wide range of postal products and public services. It is the premier national postal communication service holding together a vast country with a large population. As a true emblem of federation, it is committed to serving every one, every day and everywhere. It provides postal facilities through a network of 12,267 post offices across the country. Pakistan Postal Services Corporation. The Pakistan Post Office has a very long history in Pakistan. Its operations were, however, codified as a regular department of the Federal Government under the Post Office Act, 1898.

In addition to its principal job of conveyance of mail and transmission of money through money orders the Post Office, by virtue of its vast organization, is utilized to perform numerous functions on behalf of other departments of Federal & Provincial Government in the country. Modern technology has opened infinite vistas of progress for the Post Office in Pakistan. Introduction of mechanization and automation and the resulting increase in productivity of postal services are now offering new horizons to the planners for progress.

Management of postal services in the new conditions has also assumed new dimensions. Financial stability has become an absolute necessity and prerequisite for further expansion and improvement. At the same time, the Post Office in Pakistan is becoming more and more vulnerable to stiff competition from courier services, telecommunications, commercial banks and life insurance companies in various sectors of its activities. This necessitates, firstly, that modern techniques are adopted in every sphere of postal operations and secondly, that the post office diversifies its existing facilities and introduces new services for the people to conserve not only its traditional business but also to attract new customers. With a spirit of adventure the pot office in Pakistan has taken many new strides during the last three years. Besides introducing post buses

carrying both mails and passengers on long inter-city routes, the computerization in Postal Accounts, Postal Life Insurance and Savings Bank and designing a five digit Postcode, several special mail and financial services have been launched in the country to expand public facilities and postal business.

The response from the people to all these special services has been extremely positive and encouraging. There has been substantial increase in the volume of business and the revenue of the Department during the last three years. To provide a more compact, prompt and reliable and time certain delivery system, the private sector cooperation was also secured in Karachi in delivery of SMS mail. The sub-contracting arrangements are being extended to Rawalpindi, Islamabad & Lahore to further tune up the efficiency of service. All bulk customers including commercial organizations, institutions, multi-national companies can now avail PPSC's pick up and Credit facilities by filling up a Client Registration Form available at nearest GPO/ SMS pick Up center which will provide all necessary details and full help in completion of all formalities required for registration.

In order to further update the Special Mail Services and to offer a new package of facilities to the bulk and corporate users, contractual pick up and credit facilities have been provided at 20 key cities of the country.

DRY PORTS

General

There are nine dry ports currently operating in the country while one dry port at Gilgit is under construction. The basic objective of establishment of dry ports was to facilitate and boost the trade and industrial activities. This vital infrastructure makes it possible to organize an uninterrupted flow of imports and exports. Being a doorstep facility, dry ports help save precious time of entrepreneurs for proper utilization in productive activities rather than its wastage in traveling to distant mega cities in sorting out import and export problems.

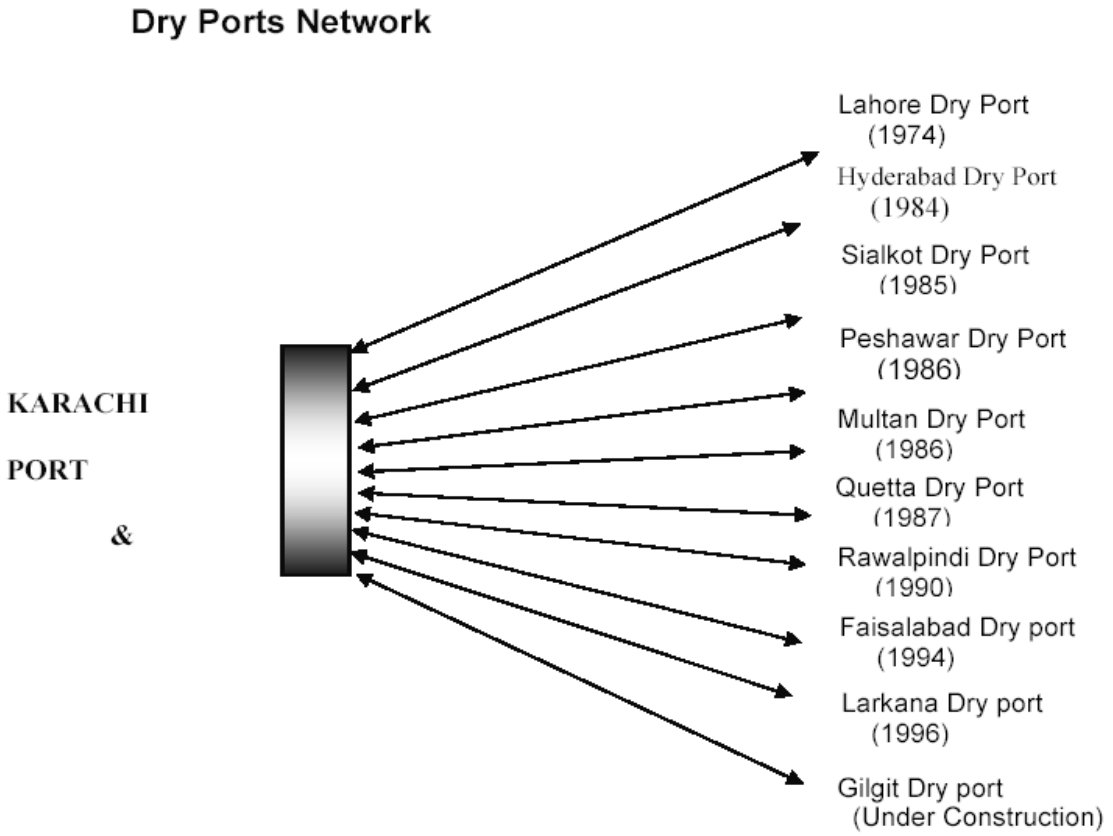


Fig. 1

INDUSTRIAL ZONES

The government of Pakistan has identified and established a total of 82 industrial estates and small industrial estates /zones throughout the country. The industrial estates in the major urban centers have mostly been established. However, opportunity for investment exists in these estates. The objective to develop industrial estates was to establish planned industrial areas, where prospective industrialists could obtain all the facilities, such as, railway, water supply, electricity, gas, telephone, godowns, sanitation, drainages, labor colonies and other necessary public facilities.

Industrial Estates

The following table shows province-wise industrial estates:

Balochistan

Industrial Estates		
o Hub Chowki	o Winder	o Quetta
o Uthal	o Dera Murad Jamali	o Gadani

Mini Industrial Estates	
o Loralai	o Turbat
o Khuzdar	o Pasni

NWFP

Industrial Estates		
o Peshawar	o Ghazi	o Nowshera
o Hattar	o Mattani	
o Gadoon Amazi	o D.I. Khan	

Small Industrial Estates		
o Peshawar	o Abbottabad	o D.I. Khan
o Mardan-1	o Kalabat	o Bannu
o Mardan-II	o Mansehra	o Kohat

Chart 2

Punjab

Industrial Estates		
o Chunian	o Thal Mandi Town, Bhakkar	o Mianwali
o Multan	o Thal Mandi town,	o Kasur Road Lahore
o Kot Lakhpat	o Jauhrabad	
Medium Industrial Estate		
o Chakwal	o Gujar Khan	
Small Industrial Estates		
o Gujranwala	o Gujrat	o Mian Chunnu
o Faisalabad	o Bahawalpur	o Khanewal
o Lahore	o Jhelum	o Raiwind Lahore
o Sargodha	o Daska	o Burewala
o Sahiwal	o Sialkot	o Shor Kot
	o Gujar Khan	o Taxila

Sind

Sind Industrial Trading Estate Ltd		
o Karachi	o Hyderabad	o Kotri
o North Karachi	o Tando Adam	o Sukkur
o Nooriabad		o Nawabashah

Small Industrial Estates		
o Khairpur		
o Gambat	o Sanghar	o Shikarpur
o Hyderabad	o Sukkur	o Larkana
o Dadu	o Rohri	o Kandhkot
o Mirpurkhas	o Badin Thatta	
Industrial Park		
o Mirpurkhas	o Sehwan	

Other Industrial Estates operating in Karachi are Federal "B" Industrial Area, Korangi Industrial Area, Landhi Industrial Area and Bin Qasim Industrial Area.

Chart 3

EXPORT PROCESSING ZONES

General

Export Processing Zones (EPZs) are free trade Zones in the country, where export oriented activities are undertaken in the manufacturing, processing, assembly and services sectors. EPZs, therefore provide an attractive investment opportunity for export oriented business ventures. There are six notified Export Processing Zones in Pakistan. Managed and promoted by the Export Processing Zone Authority (EPZA), these zones offer a range of attractive incentives to ensure lower cost, faster and smoother operations and higher profitability through the establishment of an effective one-stop-shop service to facilitate all stages of the investment process.

Notified Export Processing Zones are as under:

- Karachi Export Processing Zone (1980)
- Sialkot Export Processing Zone (2002)
- Rawalpindi Export Processing Zone (under construction)
- Saindak Processing Zone (2001)
- Reko Dek Export Processing Zone (2001)
- Risalpur Export Processing Zone (2003)

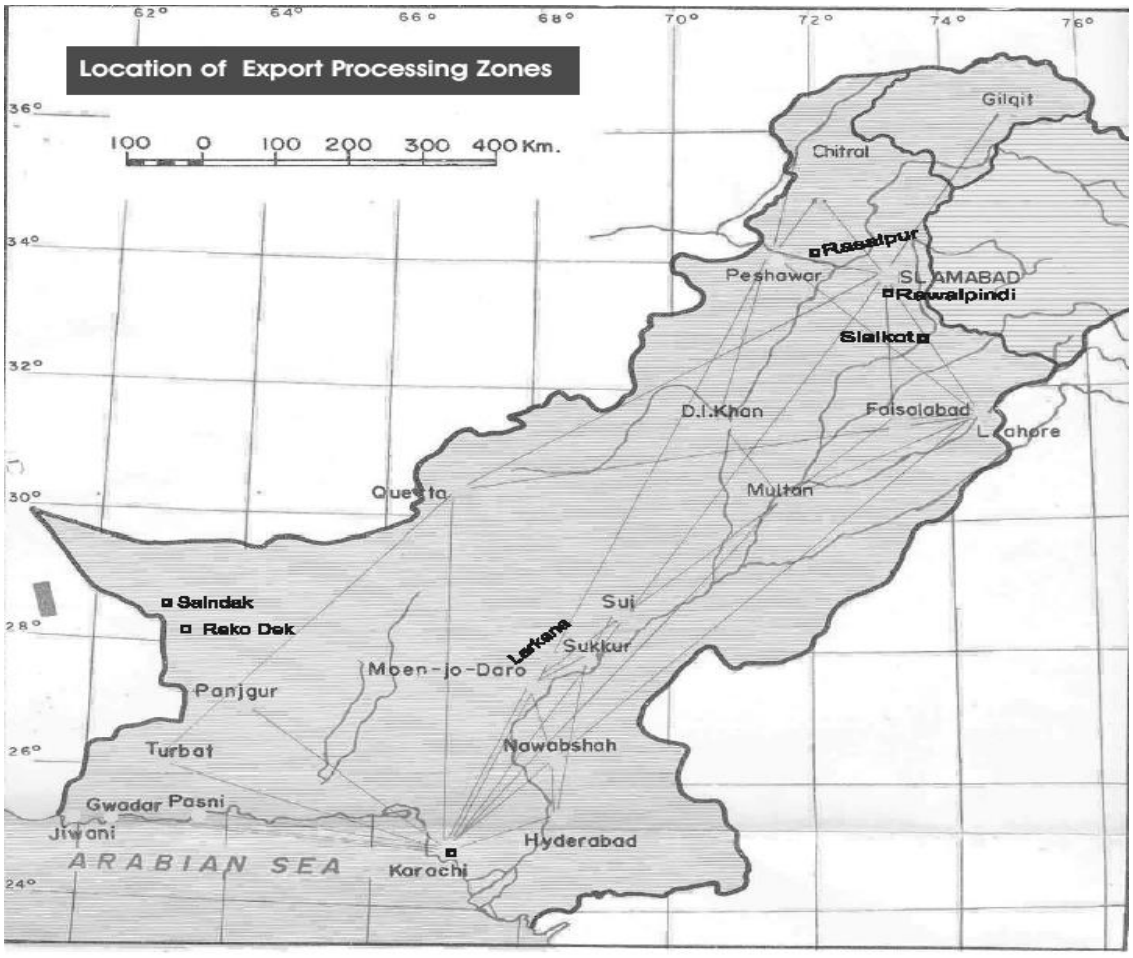
These zones have helped boost the economic activities through:

1. Creating job opportunities and raising the standard of living.
2. Transferring new skills and expertise to local human resource.
3. Promoting non-traditional exports.
4. Creating backward and forward linkages to increase the output and raise the standard of local enterprises that supply goods and services to the zone investors.
5. Transfer of new technology.
6. Developing backward regions by attracting industrial activities.
7. Stimulating strategically important sectors of the economy.

The government has planned to extend the Export Processing Zones network further to following cities:

Chart 4

o	Gwadar	Balochistan	o	Multan	Punjab
o	Quetta	-	o	Rahim Yar Khan	-
o	Pasni	-	o	Sargodha	-
o	Hub	-	o	Hyderabad	Sindh
o	Gadani	-	o	Sukkur	-
o	Duddar	-	o	Nooriabad	-
o	D. I. Khan	NWFP	o	Gilgit	Northern Areas
o	Gujranwala Punjab		o	Mirpur	Azad Kashmir
o	Gujrat	-			
o	Faisalabad	-			
o	Lahore	-			



Map 4

Incentives for Investors to Set Up a Unit In EPZs of Pakistan

1. 100% ownership rights.
2. 100% repatriation of capital and profits.
3. No minimum or maximum limit for investment.
4. Duty and tax free imports of machinery, equipment and material.
5. No sales tax on input goods including electricity and gas bills.
6. No excise duty, no customs duty on cement, steel and any other material used in construction of buildings.
7. Free from National Import restrictions.
8. Foreign Exchange control regulations of Pakistan not applicable.
9. Duty free vehicles allowed under certain conditions. After 5 years of use, vehicles can be disposed off in domestic market on payment of duty.
10. Old machinery can be sold in Pakistan after three years of its import.
11. Units operating in EPZs can undertake sub-contracting for units of tariff area subject to payment of duty and taxes on value addition only.
12. Partial processing in Pakistan allowed under sub-contracting arrangements.
13. EPZ units allowed to supply goods to customs manufacturing bonds.
14. EPZ manufacturers are treated at par with bonded manufacturers in tariff area for export incentives.
15. Relief from double taxation subject to bilateral agreement.

Karachi Export Processing Zone

Karachi Export Processing Zone, established in 1980, is located adjacent to the Landhi Industrial Area (Extension) within a distance of 18 Kilometers from Quaid-i-Azam International Airport, 20 Kilometers from Port Qasim and 35 Kilometers from the Karachi Sea port. The Zone is linked with the National Highway through road and rail network. It offers effective and convenient approach to the markets of the Middle East, Far East, Africa, Europe, America and Central Asian Republics. KEPZ possesses 500 acres of land, out of which 211 acres have been developed. Additional 100 acres are being considered for development. Additional 200 acres are being acquired from the Government of Sindh for future expansion program. The developed area has full

infrastructure facilities providing all necessary utility services like electricity, gas, water, telephone etc. There are **330** industrial plots and **70** plots for commercial sector (warehousing and trading) and **33** plots for financial sector. There are **131** operating units at Karachi Export Processing zone at present.

One Window Service

EPZA is providing one window service to the investors. Starting from initial application till export, all formalities including sanction, utilities, import/ export are handled in the Zone.

Offshore Banks and Insurance Companies

Four offshore banks and two insurance companies are operating in KEPZ, in addition to other support services. KEPZ has tremendous potential to attract foreign investment. The Zone provides excellent mechanism to speedily handle and meet all requirements of EPZ investors within Zone premises.

4.2. Importance of Foreign Direct Investment in Pakistan

The Asian currency crisis that erupted in Thailand in July 1997 and has since spread to other countries, particularly Indonesia, Republic of Korea (Korea), and Malaysia, enewed the significance of prudential management of foreign capital flows in developing countries where domestic financial markets are not yet fully developed. The crisis poses many challenges to developing countries, including how to best supervise financial institutions, how to efficiently manage foreign exchange reserves/systems, and how to prudentially manage foreign debt and investments.

From the viewpoint of foreign resource mobilization, the crisis highlights the urgent need to reexamine the optimal combination of foreign capital, i.e., proper composition of concessional public loans, commercial loans, portfolio investment, and foreign direct investment. Volatile movements of portfolio investment triggered the Asian crisis, which was reinforced by panic withdrawals of short-term commercial loans. However, it did not have any relation to foreign direct investment (FDI) due to its high stability. This underscores the importance of FDI in the developing member countries (DMCs), particularly the group of least developed DMCs where domestic financial markets are fragile and liquidity is limited. Pakistan belongs to this group. The size of its financial market was very small and its foreign exchange and debt position was precarious.

After the Nuclear tests at the end of Nawaz Sharif era and beginning of Pervez Musharraf era in 1998-99-00, foreign exchange reserves in Pakistan have remained at less than $1.3 billion, which was equivalent to only 4-5 weeks of imports of goods. Short-term debt also increased from 12% of total debt in the early 1990s to 20% in 1999. These developments increase the need for attracting FDI into Pakistan. After 9/11 circumstances turned against Pakistan's sovereignty but in favor of Pakistan's economy, as Pakistan was imposed to join the coalition against weak nations USA the current world super power and the biggest donor of funds to Pakistan lifted restrictions and the hostile atmosphere outside Pakistan for Pakistani's pursued them to send and save more remittances to /in their own country, these circumstances lead to inflow of foreign remittances to rise from $ 1 billion a year to around 4 and a half billion dollars in 2002-03.

A financially strong sound country is certainly more attractive to FDI then a country with uncertainty surrounding it. FDI is a significant long-term commitment and a part of the host economy itself. In the difficult circumstances described above, Pakistan's policy on foreign capital mobilization attached priority to (i) official multilateral assistance; (ii) official bilateral assistance; and (iii) FDI, given its increasing absorptive capacity for portfolio investment and commercial bank loans. However, concessional long-term development assistance, both multilateral and bilateral, will become increasingly scarce due to domestic financial constraints in major donors, such as Japan, and Pakistan's increased competition with other least developed countries such as Bangladesh, Mongolia, Sri Lanka, and Viet Nam. Multilateral development organizations including the Asian Development Bank are focusing on poverty alleviation and soft sectors (i.e., agriculture, rural development, education, environment, poverty, and health), while the hard sectors (manufacturing and large-scale physical infrastructure) are expected to be invested in by the private sector and foreign investors as well as the Government of Pakistan (GOP).

The positive developmental role of FDI in general is well documented. FDI produces a positive effect on economic growth in host countries. One convincing argument for that is that FDI consists of a package of capital, technology management, and market access. After the imposition of the G-7 economic sanctions in early June 1998 following Pakistan's nuclear testing, foreign exchange reserves fell to $400-500 million. However, they recovered to the previous level of $1.2-1.3 billion after the partial waiver of the G-7 sanctions and the resumption of IMF assistance programs in January 1999 to $12 billion in 2003-04, key infrastructures that enjoy actual and potential comparative advantage.

In those sectors with comparative advantage, FDI would create economies of scale and linkage effects and raise productivity. For FDI, repayment is required only if investors make profit and when they make profit, they tend to reinvest their profit rather than remit abroad. Another benefit of FDI is a confidence building effect.

While the local economic environment determines the overall degree of investment confidence in a country, inflows of FDI could reinforce the confidence, contributing to the creation of a virtuous cycle that affects not only local and foreign investment but also foreign trade and production. This phenomenon well matches the directions of historical

flows of FDI in the Asian and Pacific region. Initially, FDI had surged into the newly industrialized economies (NIEs) (Hong Kong, China; Korea; Singapore; and Taipei, China) and thereafter moved to ASEAN countries. Recently, it has been changing its direction to People's Republic of China (PRC), India, and Viet Nam. This changing stream of FDI flows suggests that the degree of confidence building, inflows of FDI, and the pace of economic growth seem to have a positive interrelation in the Asian and Pacific region.

Three important points to mention:

1. The inflow of FDI into Pakistan is small and concentrated only on a few areas, mostly in the power sector. In 1997 Pakistan accounted for 0.2% of world FDI, less than one percent of developing country and Asian country FDI, and 18% of South Asian countries' FDI. **2** In spite of liberalizing its formerly inward-looking FDI regime, tempering or removal of obstacles to foreign investors, and according various incentives, Pakistan's performance in attracting FDI has been lackluster, although post 9/11 scenario placed appositive effect on it and FDI increased like in 2004 FDI reached US $ 950 million after declining from over a billion in 2003, despite extra ordinary incentives by Govt. Of Pakistan like allowing foreign investors to take out the capital and the profit generated completely out of the country at any time they want, why could Pakistan not succeed in attracting sufficiently large FDI despite liberalizing its payments and exchange regime as well as inward FDI regime?

The present study attempts to find out the answer. In addition to other factors of course in sufficient infrastructure has reduced pakistan's attractiveness, as upto some time before the infrastructure development was solely in the hands of of Govt. which creates red-tapism, non merit tender allotments, etc. and a relatively large inflow of FDI into the power sector since 1995 has created some adverse effects, most important of which was the large increase in imports of capital goods for construction of power plants, and the ongoing conflict between the government and foreign independent power producers (IPPs) on the power rate the government needs to pay to IPPs under the purchase contract. Another negative effect of FDI concentration on the power sector was that as the remittances by IPPs began to increase, it severely constrained the balance of payments, given that foreign exchange earnings through exports of goods and services

remain low. **3.** From this undesirable pattern of FDI in Pakistan, very important lessons could be drawn for developing economies. They should be careful in allowing a large amount of FDI to non foreign exchange earning sectors during a short period of time; and FDI should be promoted in the foreign Exchange earning sector at the initial stage and to the domestic-oriented sector at the Subsequent stages, or, at least, to both sectors simultaneously.

Table 9

Table 10

Table 11

4.3 Role of the infrastructure in explaining the relative attractiveness of countries for foreign production

Availability of good quality physical infrastructure can surely improve the investment climate for foreign direct investment (Foreign Direct Investment) by subsidizing the cost of total investment by foreign investors and thus raising the rate of return. Multi national enterprises (MNE's) may consider the quality of infrastructure available to be especially important while deciding to relocate export-platform, production undertaken for efficiency considerations. In other words, quality of physical infrastructure could be an important consideration for Multi National Enterprises in their location choices for Foreign Direct Investment in general and for efficiency-seeking production in particular. To analyze the role that infrastructure availability plays in determining the relative attractiveness of a country for Foreign Direct Investment inflows and their export-orientation. Such an analysis may be of relevance to policy given, the strong competition among countries for Foreign Direct Investment inflows.

Governments of different countries, developed and developing alike, are competing among themselves to attract more Foreign Direct Investment inflows with a variety of investment and tax incentives and other policy preferences. A practical problem faced by empirical studies analyzing the role of infrastructure availability is that of measurement of availability of the different components of infrastructure objectively in an inter-country setting.

There are many aspects of infrastructure, for instance, transportation facilities like road network, ports, airports etc., communication infrastructure covering telecommunication network; energy availability, etc.

Multi national enterprises affiliates could be either exporting to their home countries or to third countries as a part of regional or global product mandates from their parent firms. It has been argued that these two types of export-oriented production are of a different nature. The third-country oriented production is seen as more demanding of location factors as Multi National Enterprises aim to achieve overall efficiency and competitiveness. Hence, it is possible that infrastructure availability is more valuable to

Multi National Enterprises relocating production for third-country sourcing rather than home country sourcing.

It is widely believed that the trend towards globalize production and marketing has major implications for developing countries' attractiveness to foreign direct investment (Foreign Direct Investment).

The boom of Foreign Direct Investment flows to developing countries since the early 1990s indicates that multinational enterprises have increasingly considered these host countries to be profitable investment locations. At the same time, various experts argue that the determinants of and motivations for Foreign Direct Investment in developing countries have changed in the process of globalization. As a consequence, it would no longer be sufficient to offer just promising markets in order to induce Foreign Direct Investment inflows. Policymakers would face rather complex challenges in striving for location attractiveness to Foreign Direct Investment. It is beyond serious doubt that the rules of the game have changed in some respects. For instance, tariff-jumping Foreign Direct Investment to serve large protected markets should have become less relevant as various developing countries have liberalized their import regime and relaxed performance requirements.

Apart from unilateral liberalization, successive rounds of multilateral trade liberalization have reduced the relevance of market access through Foreign Direct Investment for many products. The recent boom of Foreign Direct Investment in developing countries is largely due to a stronger engagement of multinational enterprises in the services and manufacturing sectors of developing countries. Recent studies suggest that Foreign Direct Investment is increasingly referred to by the attractiveness of the Physical Infrastructure in the host country; quality of physical infrastructure could be an important consideration for Multi National Enterprises in their location choices for Foreign Direct Investment in general and for efficiency-seeking production in particular. Surprisingly little has changed so far as concerns the driving forces of Foreign Direct Investment in developing countries.

The availability, reliability, and cost of infrastructure facilities (power, telecommunications, and water supplies) are important ingredients for a business environment conducive to foreign investment. Pakistan compares unfavorably in

infrastructure facilities with other developing countries that have attracted higher levels of foreign investment. Pakistan has only 18% of paved roads in good condition as against 50% in Thailand, 31% in Philippines, and 30% in Indonesia. Pakistan's extensive but poorly managed railway 18Another example of slow implementation of policies concerning investment activity is that out of 132 Memorandum of Understanding (MOUs) signed during the previous regime, only 39 had made little progress. 19 system does not make good for this disadvantage.

Telecommunication is another bottleneck: there are only 10 telephones per 1,000 persons in Pakistan compared with 31 and 112 in Thailand and Malaysia, respectively. Pakistan's amount of electricity produced per capita is higher than Indonesia's (435 kWh as against 233 kWh), but is only a fourth of Malaysia's and one half of Thailand.19 In most cases the urban infrastructure is grossly inadequate. Only 50% of population have access to safe drinking water as against 81, 72, and 78% for Philippines, Thailand, and Malaysia, respectively.20 Karachi Port is six times more expensive than Dubai port (Jebal Ali), three times more expensive than Colombo port, and twice as expensive as Bombay port. While other ports offer goods container terminal facilities, Karachi port cannot even offer priority berthing for container vessels.

There are frequent delays and cancellations of berthing and sailing due to obsolete tugs and pilot boats at Karachi port. Moreover, due to the lack of maintenance the berths are unsafe. Karachi port cannot even provide proper container handling equipment and there is a shortage of space and bad planning, resulting in high cost to the consignees. Large vessels cannot come to the port because of the lack of dredging of shipping channels. Moreover, congestion in the hazardous cargo results in containers being detained longer in the barge. All these have made Karachi port much more expensive than ports of neighboring countries (see Table 6 for item wise costs at Karachi port and other ports of neighboring countries). Such infrastructure deficiencies have discouraged the flow of FDI in Pakistan. We have taken 4 components of physical infrastructure i.e. roads, rail track, telecommunication, energy, to establish correlation.

FDI in a yearly glance

1994/95	**442.4 million $**
1995/96	**1090.7 million $**
1996/97	**682.1 million $**
1997/98	**546.4 million $**
1998/99	**472.0 million $**
1999/00	**426.3 million $**
2000/01	**452.6 million $**
2001/02	**484.7 million $**
2002/03	**798.0 million $**
2003/04	**950.0 million $**
2004/05 (Jul-Jan)	**515.0 million $**

4.3.1. Location Economies

Countries differ along a range of dimensions including the economic, political, legal, cultural and Infrastructure availability, and that these differences can either raise or lower the costs of doing business in a country. Due to differences in factor costs certain countries have a comparative advantage in the production of certain products. Pakistan might excel in textile, cotton, leather, sports goods. While Japan in automobile. Etc. US in computer software, Etc. Switzerland in Precision instruments, Etc. and South Korea in steel.

What does this entire means for a firm that is trying to survive in a global competitive market? It means that trade barriers and transportation costs permitting, the firm will benefit by basing each value creation activity it performs at that location where economic, political, legal, cultural and Infrastructure availability, including relative costs are most conducive to the performance of that activity. Thus if Pakistan has the cheapest cotton available and the cheapest and skilled labor then textile industry should be established here, if best designers are available in France then the design operation should be established in France, Etc.

4.3.2 Trends in FDI

The past 20 years have been a marked increase in both the flow and stock of FDI in the world economy. The average yearly flow of FDI increase from about $25 billion in 1975 to a record $1.3 trillion in 2000. Before slumping dramatically in 2001 to $735 billion, and to an estimate of $534 billion in 2002, between 1975 and 2000 the FDI not only accelerated but accelerated faster than the growth in world trade. E.g. between 1990 and 2001 the total flow of FDI from all countries increased about 365 %, while world trade grew by about 75 %and world output by 26 %, as the result of strong FDI flow by 2001 the global stock of FDI exceeded $6.6 trillion in total 65000 parent companies had 850000 affiliates in foreign markets that collectively produced an estimated $19 trillion in global sales, nearly twice as high as the value of global exports. FDI has grown more rapidly than world trade and world output for several reasons. One most obvious one is the ever increasing high demand of Infrastructure of MNEs.

4.4. Attracting Foreign Direct Investment Into Infra--structure

During the 1990s the world witnessed a revolution in the provision of infrastructure. Traditionally, services such as telecommunications, the supply and distribution of electricity or water, and the construction of roads, airports, ports, and railways had been defined as public sector responsibilities. In light of the large scale, up-front nature of the investments, the socially sensitive nature of the services, and the monopoly position of the service providers, infrastructure areas were generally considered unsuitable for private sector involvement.

During the past decade, however, a large number of industrial and developing countries have opted to open these sectors to private investors. To some extent this trend was facilitated by technological innovation. In telephony, for example, the emergence of cellular networks created a viable alternative to fixed-wire telephony without the technical need for monopolistic market structures. But at the forefront of this turnaround was an increasing dissatisfaction with the quality and quantity of service provision by the existing state-owned enterprises, while the gap between unsatisfied demand and available public sector funds kept widening.

There are several reasons for the disappointing performance of public utilities and service providers. First, public sector companies generally lack the necessary incentives to act as commercial entities. Cost-effectiveness and profit generation tend to be relatively low priorities. Excess staffing and low-quality service provision often are the result. In addition, sociopolitical objectives frequently create pressures on service providers to charge consumers highly subsidized rates that do not cover the actual cost of service provision. The resulting insufficient cash flow leads to a lack of funds to undertake the needed expansion and rehabilitation investments, and often even maintenance suffers. For final consumers, this translates into a serious shortage of reliable public services. Shortages in potable water, electricity brownouts, traffic congestions, frequent breakdowns of telephone mainlines, and insufficient transport capacity for reliable trade are common features in most developing countries.

While public utilities struggle to maintain already inadequate systems, demand pressures continue to build through economic growth and population expansion. Unable to generate the necessary investment capital through their own operations, these companies tend to turn to the central government for allocations from the general budget; increasing budgetary pressures, however, make it impossible for most governments to satisfy these demands.

Consequently, starting in the 1980s a number of governments began to actively explore other means to provide infrastructure services in a more economical and efficient manner. The private sector presented itself as a logical alternative, and the 1990s saw a virtual explosion of private sector involvement in the provision of infrastructure services. Private lenders and equity investors became involved in providing infrastructure services around the world through full-scale privatization of public sector entities, the construction of new facilities with private capital on the basis of build operate-transfer (BOT)-type investments, lease arrangements, and operation and management (O&M) contracts. In fact, during this time an entirely new industry developed. Prior to the 1990s, most major multinationals active in the infrastructure areas supplied equipment, machinery.

1. What Is a "BOT-Type" Project?

The label "BOT" is typically being used for a wide variety of investment projects, and there tends to be some degree of confusion about the appropriate terminology. Because BOTs were initially the most common form of private Greenfield investments in infrastructure, the term tends to be used as the generic label for privately owned and operated infrastructure projects financed on a non-recourse basis under a concession-type arrangement. Under such an arrangement, a private company or consortium typically forms a project company based on the right to build or rebuild a facility and to operate it for a fixed time period. The company recoups the investment and operating costs as well as an annual rate of return exclusively from the revenue stream generated by the project through charges levied on the service user(s), without any recourse to the balance sheets of sponsors or the host government. On the basis of these commonalities, a number of contractual arrangements have emerged.

Pakistan has also realized the importance of private participation with privatizing most of the public sector operations and organizations to private ownership, and to transfer the local area works to local bodies which has clearly a great positive effect which I have witnessed my self when I had a visit to the local Govt. office I could see the fast planned and implemented projects of infrastructure development and improvement in Karachi city, this is limited not just to Karachi it is changing the look all over the country in fact the housing infrastructure in Pakistan is nearly in the hands of private sector, there is a greater need for these parties to participate in other forms and kinds of infrastructure. With privatization and liberalization came the need to make long-term commitments to individual projects, and to take significant equity shares in these ventures. Some companies proved more flexible and willing to take on these additional risks, resulting in a new level of competition among the market leaders as well as the emergence of new challengers in the industry.

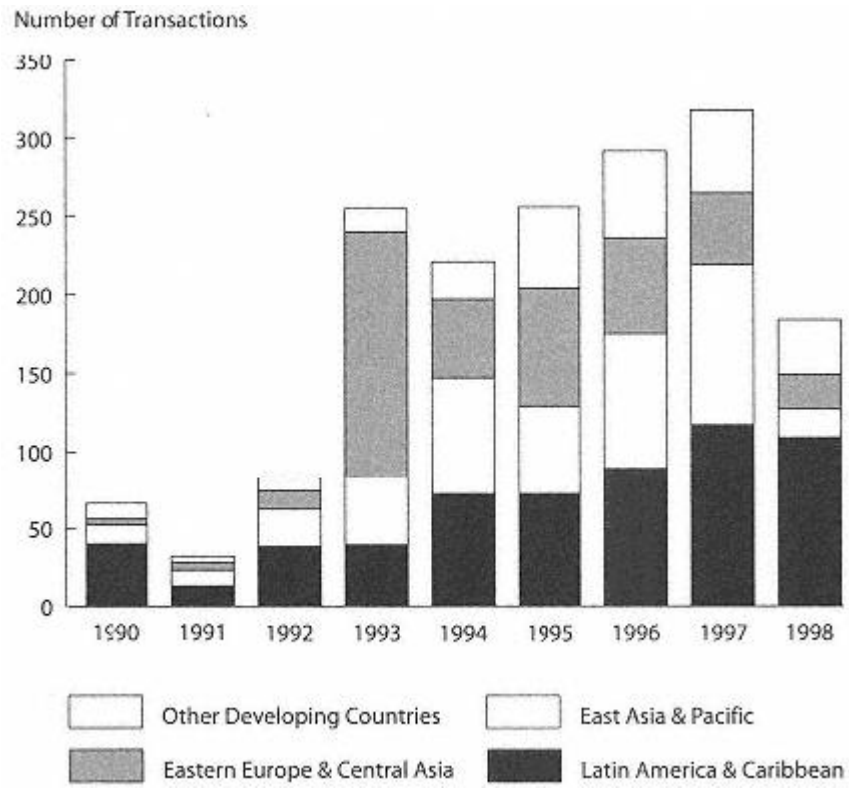
Although these industry changes and their developmental impact have been remarkable, it has not been a smooth process. For most governments, privatization and sectoral liberalization have posed a political challenge, and social concerns have often delayed reform. Furthermore, creating an environment acceptable to private investors has proven more difficult than most governments expected. The political crisis in Pakistan and 9/11

crisis further complicated the situation by revealing the high-risk nature of these investments. Investment projects-especially greenfield investments through concessions and BOT-type arrangements-have frequently suffered from drawn-out negotiations, implementation delays, contract cancellations, and costly legal disputes, and many projects have failed outright.

4.4.1. Foreign Direct Investment-The Engine Behind the Private Infrastructure Revolution

The increase in the private financing and management of infrastructure facilities during the 1990s has been dramatic. The World Bank compiles statistics on completed private infrastructure projects in energy, water, transport and telecommunications in the developing world. 1 This Private Participation in Infrastructure (PPI) Project Database records a total of 1,707 transactions worth US$458.2 billion in project costs for the period 1990-98. 2 the rapid increase in the number of transactions worldwide during the 1990s, starting from just 66 projects worth US$11.8 billion during 1990, and reaching a peak of 318 projects worth US$117.6 billion in 1997.

Primarily because of a large volume of privatization transactions, Latin American countries dominated this growth in private infrastructure activity in the developing world. The region represents about one-third of all transactions, and in terms of project costs accounts for 45 percent. East Asian economies recorded 428 transactions during this period, i.e., about one- quarter of the developing world, amounting to US$141.7 billion or 31 percent of the total. In comparison, Eastern and Central Europe actually had a slightly larger number of transactions; but in terms of project cost volume, these transactions amounted to only about US$50 billion. The other regions-South Asia, Sub-Saharan Africa, and Middle East and Northern Africa-show significantly less activity in private infrastructure projects. But here also the transaction volume has grown rapidly during the 1990s with a peak volume of US$22.8 billion in 1997, starting from a mere US$575 million in 1990.



Graph.2

Number of Private Infrastructure Transactions in Developing Countries (Number of projects, 1990-98)

3. The data show a substantial decline in the transactions concluded during 1998, reaching only 184 compared to 318 the year before. In terms of project cost, investment activity declined by over one fifth to an estimated US$91.8 billion. Only Latin America avoided such a decline, based on sizable privatization transactions in Brazil during that year; the sale of a series of large fixed-wire and cellular telecom operations in Brazil during the year alone generated about US$20 billion. All other regions were to some extent affected by this contraction, but the East and South Asian economies took the brunt of it. In these two regions, the investment volume in terms of project cost fell from US$8.5 billion in 1997 to an estimated US$3.1 billion in 1998.

The main reason behind this drastic decline has been the reluctance of foreign equity investors and commercial lenders to provide additional financing. Massive devaluations in East Asia brought a number of projects to the brink of bankruptcy. The increased volatility in exchange rates worldwide also caused investors to shy away from committing large amounts of hard currency to projects that primarily rely on cash flow

generation in domestic currencies. Finally, the struggle of independent power producers (IPPs) with the newly elected Government of Pakistan over a potential renegotiation of contract terms, agreed to by the previous administration, added to the market jitters.

In general, 1998 brought a substantial rise in the perceived risk by investors and lenders to infrastructure projects, with macroeconomic developments threatening project viability and the reliability of long-term governmental commitments becoming more questionable. Overall, however, the growth of private infrastructure activity in the developing world remains impressive. The primary engine behind this rapid expansion during the 1990s clearly has been foreign direct investment. To develop a better understanding of the role of foreign investors in private infrastructure.

Table 1. FDI is Key in Private Infrastructure in the Developing World
(Aggregate data, 1990–98)

	Number of Transactions			*Project Cost in US$ Billion*		
Sector	*Total*	*With Foreign Sponsor*	*% Share of Foreign*	*Total*	*With Foreign Sponsor*	*% Share of Foreign*
Electricity	230	208	90.4	102.6	88.6	86.3
Telecom	116	111	95.7	68.7	61.4	89.4
Water/Waste	52	43	82.7	20.8	20.4	98.0
Transport	144	89	61.8	50.4	31.5	62.4
Airports	13	13	100.0	8.6	8.6	100.0
Seaports	26	19	73.1	3.6	2.2	61.8
Rail	39	29	74.4	12.7	11.1	88.1
Roads	66	28	42.4	25.6	9.5	37.1
TOTAL	542	451	83.2	242.5	201.8	83.2

Note: This information is based on the FIAS dataset. A project is considered "foreign" if it includes at least one foreign entity as member of the project company, involving operational responsibilities and equity participation.

Table 12

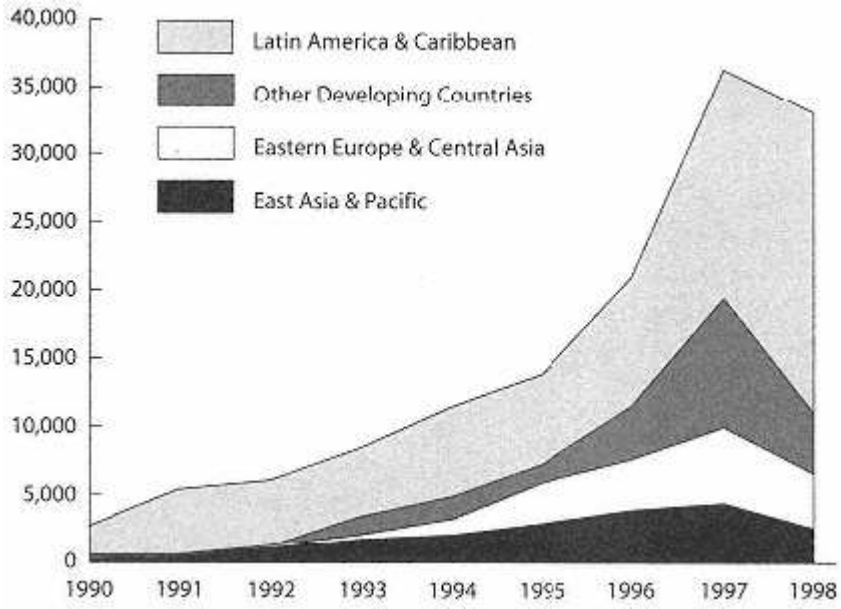
4. The foreign equity investors participated in over 80 percent of all projects, whether measured by number of transactions or total project costs. The extent of foreign investor participation differs depending on the particular sector, but remains very high in all cases. In areas where technical skills were available within the country, such as road construction, governments tended to rely on domestic investors, frequently even excluding foreign participation. But in areas of high technical skill requirements-such as telecommunications, airport operations or electric and water utilities-foreign partners were crucial. As these types of services were typically provided by public sector monopolies, no expertise existed within the country to undertake such projects, requiring strong involvement of strategic foreign partners. This strong involvement of foreign investors implies that the trend of increased private sector involvement in infrastructure has a significant impact on developing country balance-of-payments through foreign direct investment (FDI) inflows. Private infrastructure projects generated an estimated US$138 billion in FDI inflows during the period 1990 to 1998, accounting for over 17 percent of total FDI inflows to the developing world.

Following the trend of rapidly growing transaction activity during this time period, FDI inflows from infrastructure projects rose from US$2 billion in 1990, or about 11 percent of total FDI, to US$33 billion in 1998, representing almost 23 percent of total FDI. This share is even higher in those countries that relied particularly on the participation of the private sector in infrastructure development.

In Brazil, for example, one third of total FDI flows resulted from infrastructure investments during this period, and in the Philippines this share was 20 percent. In Mexico and China, on the other hand, these shares were only 5 and 1 percent respectively, despite significant foreign participation in infrastructure investments. In these latter cases, infrastructure was dwarfed by stronger overall FDI activity. But infrastructure FDI inflows in 1998 were also affected by the Asian crisis, declining by about 9 percent from the 1997 peak of US$36.3 billion.

Only Latin America escaped this contraction, primarily due to sizable privatizations in the Brazilian electricity and telecommunications market. In fact, excluding Latin America, FDI flows dropped by 44 percent. South and East Asian economies were not the only ones to suffer from the crisis; Eastern Europe, Africa and the Middle East, all of

which had experienced substantial increases in private infrastructure investment, recorded a drastic drop in infrastructure FDI inflows during 1998. A breakdown of these foreign investments by the different infrastructure sectors shows that telecommunications and electricity clearly dominate.



Graph 3.

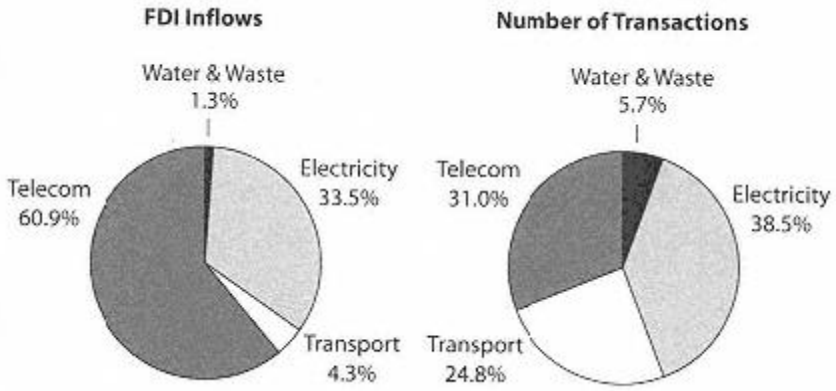
FDI Inflows to Developing Countries from Infrastructure Projects (US$ millions, 1990-98)
Note: FDI data estimated based on project-specific information

In terms of FDI inflows, the two sectors combined account for almost 95 percent. But when measured by number of transactions, the transport and water and waste sectors represent almost one-third of all concluded projects. This discrepancy points to the importance of the size of individual deals.

Transactions in fixed-wired telecommunications typically take the form of a privatization of sizable state-owned monopolies to strategic investors from abroad. Investments in water and waste or transport facilities, on the other hand, typically are through smaller greenfield and rehabilitation investments. This importance of the size of individual transactions is also reflected in the particular type of transaction used. Privatization clearly is the largest generator of FDI. It represents two-thirds of total FDI inflows, but is used in only 22 percent of all concluded transactions. BOT-type investments and concessions, on the other hand, represent only about 30 percent of infrastructure FDI

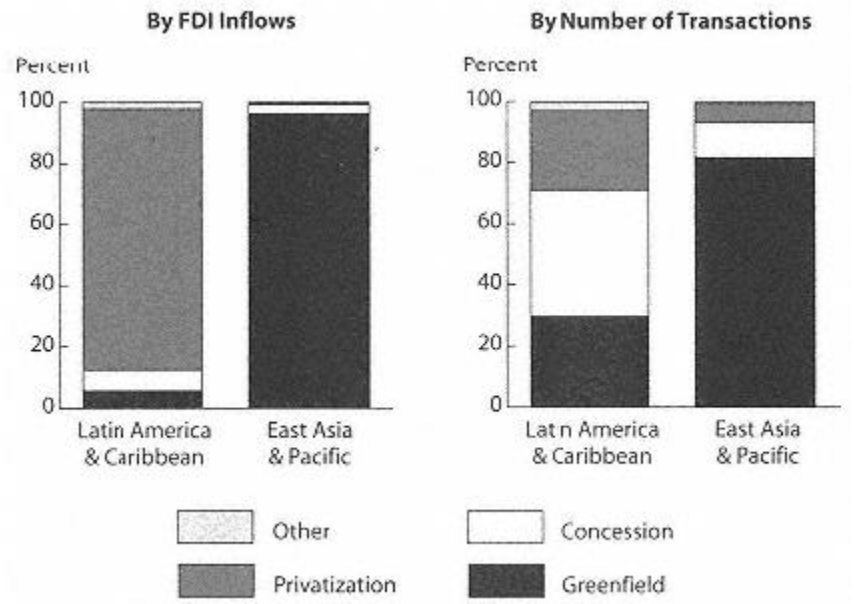
inflows, while they are the project vehicle of choice in over three-quarters of all transactions.

The different transaction types reflect substantial differences in overall strategy. Latin American countries are typically heralded as having a broader approach to sectoral liberalization, combining private sector involvement in the creation of new capacity with the privatization of existing assets. Their East Asian counterparts, on the other hand, are known for relying strongly on the creation of new capacity without parallel sectoral reforms, the general perception by directly comparing the use of different transaction types in the two regions.



Graph 4.
FDI in Infrastructure, by Sector (Percentage shares based on FDI inflows and number of transactions, 1990-98)

Latin American economies clearly generated the vast majority of their infrastructure FDI inflows of US$78.7 billion through privatization. Greenfield and concession arrangements account for only about 12 percent of total inflows.



Graph 5

Different Strategies: Latin America and East Asia Compared (Based on US$ in FDI and number of transactions, 1990-98)

A breakdown by number of transactions, however, suggests a far more balanced approach with various forms of private sector involvement used. In fact, only about one-quarter of all transactions stemmed from privatization, while concessions 5 accounted for 42 percent and greenfield investments for another 30 percent. In East Asia, on the other hand, governments relied almost exclusively on greenfield investments. Virtually all of the region's estimated FDI inflows from infrastructure projects of US$18.9 billion came through BOT-type arrangements, and more than 80 percent of the recorded transactions represent greenfield investments.

Regarding the origin of foreign investors, U.S. companies dominated, being responsible for about one-third of the FDI inflows to developing countries through infrastructure investments. However, a number of European companies played a vital role-especially Spain, France, and Germany. Particularly noteworthy was the increased presence of developing country companies-primarily from Chile and Malaysia-which accounted for an estimated 9 percent of total infrastructure FDI inflows. In terms of regional distribution, investors tended to follow the pattern encountered in FDI flows in general.

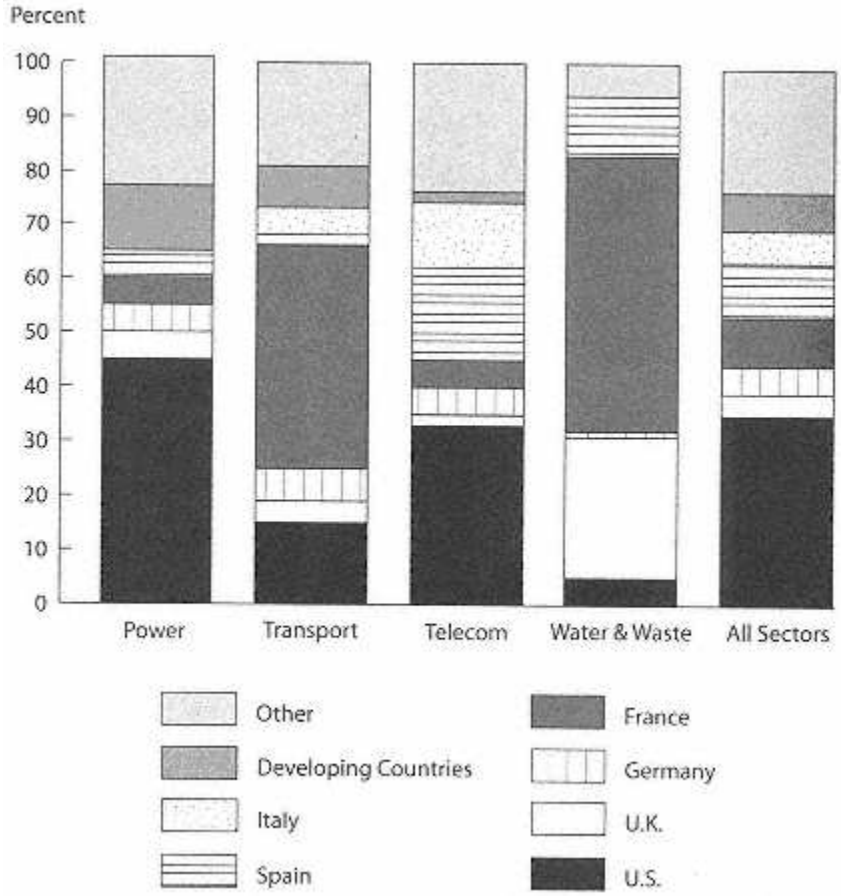
United States investors tended to concentrate on Latin America as their preferred region, which received about two-thirds of U.S. infrastructure investment abroad. Similarly, Spain focused almost entirely on the Latin America region. In fact, a number of Spanish

telecom and electricity companies explicitly made the region their focal point for international expansion and diversification strategies. Germany, on the other hand, concentrated on Eastern European countries, which absorbed about half of German infrastructure investment abroad.

But besides the standard general determinants of FDI flows, such as geographic proximity or cultural affinity, infrastructure investments show strong sector concentrations by individual investor home countries, reflecting a particular industrial specialization in the various infrastructure activities. U.S. companies clearly dominate the electricity industry, accounting for about 45 percent of total FDI inflows in this sector. The large U.S. telecommunications companies also play a crucial role, with about one-third of total FDI in this sector. But competition from the various European telecoms is strong, as they together provided about 40 percent of FDI in this sector during the period. Striking is the dominance of French companies in the transport and water and waste sectors. Because of the long tradition in domestic concession arrangements, the large construction and service companies in France seem to have a distinct advantage in these markets, resulting in FDI shares of around 50 percent in both sectors. But British water companies also have pursued international opportunities following their creation during the privatization of the U.K's water industry in 1989. Pakistan has started several projects with international cooperation, like Chinese firms are working at Gwadar port, Makran coastal highway, II chashma nuclear power plant, copper mining field in balochistan, several dams under construction, transport companies in Karachi and other cities of the country, etc.

Those companies seem to make inroads in this market and account for about one-quarter of all FDI inflows to developing countries. A final word of caution is in order for those trying to assess the importance of private infrastructure projects solely on the basis of their direct contribution to FDI inflows. Because infrastructure is the backbone of any economic system, investments in the expansion or improvement of infrastructure capacity will result in a strong multiplier effect on economic development and growth in general. But even for FDI inflows themselves, the impact is most likely not limited to these individual, project-specific investments.

First and foremost, infrastructure projects tend to be particularly large and visible. Foreign investors will carefully watch the process to see how the government handles these investments, and a successful implementation of such large-ticket items can help significantly to improve the perception among all types of investors of the country as an investment location. Furthermore, weak and unreliable infrastructure services present one of the most debilitating impediments to a successful business operation in most developing countries. The prospects of increased capacity and efficiency in service delivery therefore promises future investors that these bottlenecks will be eliminated in the near future.



Graph 6.
Investor Origin, by Sector (Percentage shares based on FDI inflows, 1990-98 aggregate) Note: FDI data estimated based on project-specific information.

4.5. Review of FDI Policy

Policies of host countries have an important influence on foreign investment decisions. Host countries can adopt policies of stimulating foreign investment or they can restrict foreign participation in their economies in various ways. Exports of services here imply mostly overseas workers. Annual remittances of overseas workers inclusive of their foreign currency deposits amount to about $3 billion. Pronouncements affect the perception of "political risk" by transnational corporations (TNCs) and thereby the amount of investment of these companies. In addition, host country policies can be instrumental in channeling investment flows toward sectors considered to be of particular importance to the country's development.

Pakistan was basically an agricultural economy upon its independence in 1947. Its industrial capacity was negligible for processing locally produced agricultural raw material. This made it imperative for succeeding governments to improve the country's manufacturing capacity. In order to achieve this objective, however, changing types of industrial policies have been implemented in different times with a changing focus on either the private sector or the public sector. During the 1960s, government policies were aimed at encouraging the private sector while during the 1970s, the public sector was given the dominant role. In the 1980s and 1990s, the private sector was again assigned a leading role. Especially during the decade of the 1990s, Pakistan adopted liberal, market-oriented policies and declared the private sector the engine of economic growth. Moreover, Pakistan has also offered an attractive package of incentives to foreign investors.

The basic rules on foreign investment as stated above were laid down in the Foreign Private Investment (Promotion and Protection) Act 1976. Originally, each foreign investment was subject to separate authorization, but this requirement was eliminated in May 1991. In general, no special registration was required for FDI, and the same rules and regulations were applied to FDI as to domestic investors. The requirement for government approval of foreign investment was removed with the exception of a few industries such as arms and ammunition, security printing, currency and mint, high explosives, radioactive substances, and alcoholic beverages (in fact, these industries were also closed to domestic private investors). In all industrial sectors other than those

indicated above, not only foreign equity participation of up to 100% was allowed but also, foreign investors can purchase equity in existing industrial companies on a repatriable basis. In non industrial sectors, foreign investment was excluded from agricultural land; forestry; irrigation; and real estate including land, housing, and commercial activities.10 All investors, whether domestic or foreign, were required to obtain a No Objection Certificate (NOC) from the relevant provincial government for location of their projects. Thus, the physical location of the investment was effectively controlled by the provincial governments, which was considered a major bottleneck in speedy industrialization. At present, an NOC is only required for foreign investment in areas that are in the negative list of the relevant provincial government. There are only a small number of areas that are on the negative list of the provincial governments.

In the past, investors (domestic and foreign) were not free to negotiate the terms and conditions of payment of royalty and technical fees suited to the requirements of foreign collaborators for technology transfer. The government, therefore, streamlined the procedures and investors are now free to negotiate the terms of conditions suited to them as well as acceptable to multinationals wishing to transfer the requisite technology.

One of the most important measures taken recently by the government affecting FDI has been the liberalization of the foreign exchange regime. Residents and nonresident Pakistanis and foreigners are now allowed to bring in, possess, and take out foreign currency, and to open accounts and hold certificates on foreign currency. Foreigners using foreign exchange have now access to the capital market. For example, no permission is required to issue shares of Pakistani companies to foreign investors, unless they belong to industries included in the Specified List. To further liberalize the foreign exchange regime, the Pakistani rupee has been made convertible effective 1 July 1994. The ceiling earlier imposed on contracting foreign loans has been abolished. Permission of the Federal Government or the SBP would not be required regarding interest rate or payment period of foreign loans not guaranteed by the Government of Pakistan. Foreign currency account holders are now also allowed to obtain rupee loans collateralized against the foreign currency account balance.

The government has also enacted an extensive set of investment incentives including credit facilities, fiscal incentives, and visa policy. Foreign-controlled manufacturing

companies exporting 50% or more of their production can now borrow working capital without any limit. Other foreign-controlled manufacturing companies including those not exporting and selling in the domestic market can borrow rupee loans equal to their equity without prior permission of the SBP. Prior permission of SBP is also not required for raising domestic credit to meet fixed investment requirement.

A number of fiscal incentives include a three-year tax holiday to all industries throughout Pakistan set up between 1 December 1990 and 30 June 1995. Investments in delineated rural areas, industrial zones, and less developed areas enjoy five and eight years tax holiday respectively, together with special custom duty and sales tax concessions. The import policy has also been liberalized considerably, and the maximum tariff rate has been reduced from 225% in 1986/1987 to 45% in 1996/1997. A large number of quantitative restrictions and non tariff barriers have been removed, and the negative and prohibited lists of imports have also been reduced. Export incentives have also been broadened. The highly cumbersome duty-drawback system is being replaced with a scheme whereby 80% of the duty-drawback is paid automatically within three days to the firm, and the remaining 20% is paid within one week after inquiry.

The visa policy of Pakistan has been modified to make it attractive to foreign investors. Foreign investors with substantial investment are granted 3 years multiple entry visa. There is no restriction/requirement for work permit for foreign managerial and technical personnel for gainful employment/occupation in private firms in Pakistan. Special industrial zones (SIZs) have been set up to attract foreign investment in export-oriented industries. Apart from foreign investors, Pakistanis working abroad are also eligible to invest in SIZs. The government is responsible for providing the necessary infrastructure and utility services in the SIZs. Investment in SIZs is exempted from existing labor laws of the country. Hefty fiscal incentives are given to foreign investors in the SIZs, which include income tax holiday for a period of 10 years provided the plant commences commercial operation as of 30 June 1999; duty-free imports of plant and machinery not manufactured locally; and tax exemption on capital gains, to the extent of the foreign equity share, for a period of five years from the inception of the venture. Foreign investment in Pakistan is protected through the Constitution as well as through specific

laws. Section 8 of the Protection of Economic Reforms Act 1992 provides legal cover to foreign investment in Pakistan.

Beside these statutory protections, the Multilateral Investment Guarantee Agency (MIGA) provides a means of obtaining insurance cover against noncommercial risks. Pakistan is a top beneficiary of the MIGA investment cover. MIGA has provided Pakistan with 9.4% of its investment insurance facilities, the highest among other developing countries.

In November 1997, the government issued the New Investment Policy which includes major policy initiatives. In the past, foreign investment was restricted to the manufacturing sector. Now foreign investment is allowed in sectors like agriculture and services, which constitute above three fourths of gross national product. The main objective of the new policy is to enhance the level of foreign investment in the fields of industrial base expansion, infrastructure and software development, electronics, engineering, agro-food, value-added textile, tourism, and construction industries. Foreign investment on a repatriable basis is now also allowed in agriculture, services, infrastructure, and social sectors, subject to these conditions: (i) the basis is joint venture (60:40); (ii) foreign equity will be at least $1 million; (iii) foreign companies registered in Pakistan will be allowed to invest; and (iv) for social sector and infrastructure projects, joint venture is waived (100% foreign equity may be allowed).

The manufacturing sector has also been prioritized into four categories: (i) valueadded or export industries; (ii) hi-tech industries; (iii) priority industries; and (iv) agro-based industries. The tariff on imported plant, machinery, and equipment (PME) that are not manufactured locally for categories (i), (ii), and agriculture is zero while that for categories (iii), (iv), and social services will be charged 10%. First year allowance of cost of PME would be available at 90% for (i) and (ii), at 75% for categories (iii) and (iv), and at 50% for other industries. Reinvestment allowance for expansion would be allowed at 50% of cost of PME.

Notwithstanding significant deregulation and various incentives/concessions given to foreign investors, Pakistan still faces serious problems as far as implementation of foreign investment policies are concerned. There is a strong perception among foreign investors that the pro-business policies and inducement used to attract prospective new

investors are somehow weak given realities when they actually begin to set up and operate their business in Pakistan.

May 24 the latest development in FDI, The federal government has decided to allocate Rs319.4 billion for next year's development programme and to set up two funds of Rs6 billion — road development fund and infrastructure fund. It would be formally approved by the National Economic Council (NEC) which will meet here on May 27 with Prime Minister Shaukat Aziz in the chair. A copy of the summary for the NEC made available to Dawn suggests that the Rs319.4 billion development budget would include a Public Sector Development Programme (PSDP) of Rs272 billion. The PSDP will include federal projects of Rs204 billion, provincial projects of Rs68 billion and a foreign exchange component of Rs52 billion.

Infrastructure would get Rs99.3 billion, social sectors Rs78.9 billion and other sectors will be given Rs25.8 billion. The NHA has been asked to establish a roads development fund. The annual budgeted amounts for the NHA and the toll collected by it would form part of this fund.

Another fund to develop basic infrastructure would be set up in cooperation with multilateral lenders like the World Bank and the Asian Development Bank. Under this initiative, Rs1 billion has been allocated for 2005-06 to promote the public-private partnership. The infrastructure fund would be managed by professional managers under the finance ministry.

Special programmes have been given an allocation of Rs17.9 billion, including Rs12 billion for two phases of the Khushal Pakistan Programme, Rs5.5 billion for new projects, Rs1 billion each for village electrification, ongoing projects and development of less developed areas. Another Rs5 billion have been allocated for the Khushal Pakistan Fund.

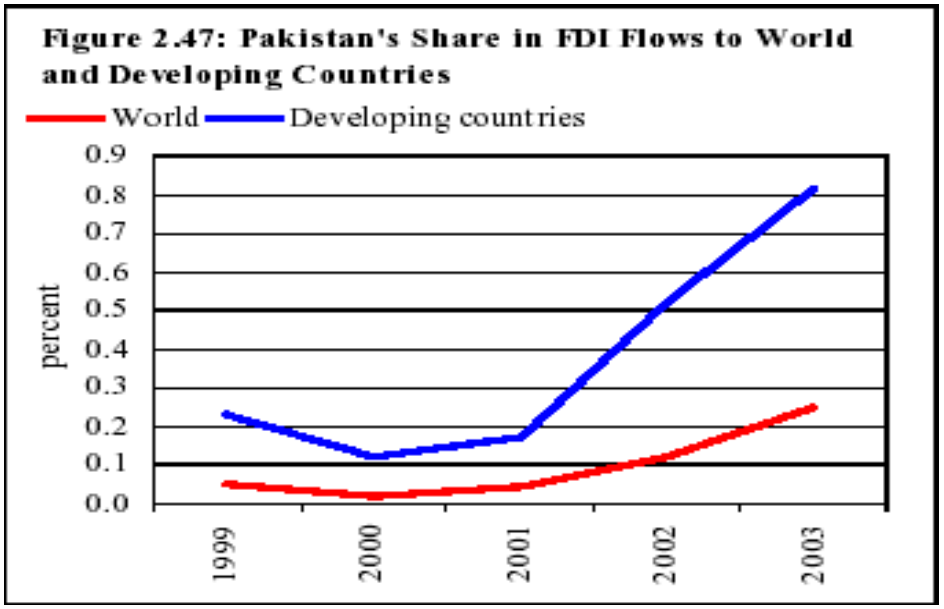


Figure 2.47: Pakistan's Share in FDI Flows to World and Developing Countries
World
Developing countries
percent
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1999
2000
2001
2002
2003

Graph 7

4.6. Trends, Issues, Foreign Direct Investment, and Economic Impact of FDI

4.6.1. Trends

The success of FDI policies can be judged by the size of the inflows of capital. Pakistan has been making efforts to attract FDI and such efforts have been intensified with the advent of deregulation, privatization, and liberalization policies initiated at the end of the 1980s. The amount of foreign investment rose from a tiny $10.7 million in 1976/1977 to $1296 million in 1995/1996, thus growing at the annual compound growth rate of 25.7 percent. However, it declined to $950 million in 1996/1997. With the beginning of the overall liberalization program (1991/1992 onwards) the inflow of foreign investment grew at the compound growth rate of 15.2 percent. Investment inflows in 1995/1996 increased by 93.3% mainly due to the inflow of investment in power sector.

Although significant by absolute terms, the increase appears trivial when compared to the relatively more buoyant economies of East and Southeast Asia. While FDI flows to all developing countries reached $150 billion in 1997, East and Southeast Asia received the bulk of this share.

Total foreign investment consists of direct and portfolio investment. Prior to 1991/1992, portfolio investment has not only been low but also exhibited a fluctuating trend. However, with the beginning of liberalization policies in 1991/1992, portfolio investment crossed the $1.0 billion mark in 1994/1995. This impressive increase does not reflect the true picture of the trends in portfolio investment witnessed during the post-liberalization period. If the $862.2 million sale of Pakistan Telecommunications Corporation (PTC) vouchers, which was a one-time phenomenon, was excluded, the portfolio investment not only declined to $227.8 million in 1994/1995 but followed an average trend of $215.4 million during 1991/1992 to 1995/1996 as against an average flows of only $9.0 million prior to reform (1984/1985 to 1990/1991).

The major component of the total foreign investment is FDI. As can be seen from despite yearly fluctuations, the amount of FDI rose from $70.3 million in 1984/1985 to $1090.7 million in 1995/1996, thus growing at the compound growth rate of 25.7 percent.

However, it decreased to $682 million in 1996/1997. Since the beginning of the liberalization program (1991/1992), FDI has grown faster than in the pre-liberalization period (1984/1985-1990/1991). In particular, 1995/1996 registered a phenomenal growth of 146.5% mainly due to the inflow of FDI in the power sector. FDI, on average, accounted for nearly 80-85% of total inflows over the period 1984/1985 to 1996/1997. Reports the inflow of FDI by origin since 1981/1982. The US and UK have been the major sources of FDI in Pakistan, although the shares of both US and UK have fluctuated widely, falling as low as 8.8% for the US and 4.7% for the UK and rising as high as 63.7% and 35.2%, respectively. The share of the US has been, by far, the largest of all the countries, averaging 32.4% over the last 16 years followed by the UK (12.9%), UAE (11.6%), Japan (5.7%), and Germany (5.4%). During the post-reform era, the share of the US further rose to 42.0% followed by the UK (12.3%), Japan (6.4%), Germany (5.4%), and the UAE (4.7%). It may be noted that Japan, which has emerged as a major investor globally (averaging $27.9 billion during 1990-1997), has annually invested only $32.3 million (or 0.1%) in Pakistan during the same period.

Factors Influencing the Flow of FDI in Pakistan

Before the Asian crisis, the world had experienced rapid growth in the flow of FDI, which rose from $204.2 billion in 1990 to $400.5 billion in 1997. Developing countries have made impressive gains in attracting FDI, the flow rising from $33.7 billion to nearly $150 billion during the same period. The gains owe, to a large extent, to the growing attractiveness of the PRC, which accounted for 30.4% of total FDI to developing countries in 1997.

The Asian countries have also strengthened their role as the largest developing-country FDI recipient region with an estimated $87 billion of inflows in 1997. The East and Southeast Asian countries have attracted $82 billion in FDI in 1997 accounting for 21% of the total world flows and 55% of total developing countries' flows. Viewed in the background of these developments, the inflow of FDI in Pakistan remains far from encouraging despite numerous incentives offered to foreign investors, particularly after the liberalization program initiated since 1991/1992. Incentives like 100% foreign ownership of capital, foreign investors operating their companies without enlisting in the local stock exchanges, no limit for remittance of profits and dividends abroad, allowing disinvestment of the originally invested capital at any time, and no prescribed

limits for remittance of royalties and technical fees abroad by foreign investors are highly competitive with incentives offered by many other developing countries to the prospective foreign investors.

Besides these incentives, Pakistan with a population of about 130 million offers a vast potential for the marketing of both consumer and durable goods. Various incentives apart, these two factors should alone have attracted a respectable amount of FDI in Pakistan. However, by looking at the amount of FDI in Pakistan in recent years, it appears that the incentives and other factors have resulted in limited success. Why was Pakistan not able to attract FDI; Hong kong, China; Malaysia; and Thailand despite offering competitive incentives, favorable geographical location, and a relatively large population? This section attempts to provide answers to this query.

A summary of host country determinants of FDI in general is given shortly. In view of these determinants, the fundamental requirement that governs foreign investment in Pakistan revolves around ten main factors, which could be called the ten checkpoints. These are political stability; law and order; economic strength; government economic policies; government bureaucracy; local business environment; infrastructure; quality of labor force; quality of life; and welcoming attitude.

Host Country Determinants of FDI

Host Country Determinants	Type of FDI Classified by Motives of Firms	Principal Economic Determinants in Host Countries
I. Policy Framework for FDI	A. Market-seeking	Market size and per capita income
Economic, political, and social stability		Market growth
Rules regarding entry and operations		Access to regional and global markets
Standards of treatment of foreign affiliates		Country-specific consumer preferences
Policies on functioning and structure of markets (especially competition and policies governing mergers and acquisitions)		Structure of markets
International agreements on FDI	B. Resource/ Asset-seeking	Raw materials
Privatization policy		Low-cost unskilled labor
Trade policy (tariffs and nontariff barriers) and coherence of FDI and trade policies		Skilled labor
Tax policy		Technological, innovative and other created assets (for example, brand names), including as embodied in individuals, firms, and clusters
II. Economic Determinants		
III. Business Facilitation	C. Efficiency Seeking	
Investment promotion (including image-building and investment-generating activities and investment-facilitation services)		Physical infrastructure (ports, roads, power, telecommunications)
Investment incentives		Cost of resources and assets listed above, adjusted for labor productivity
Hassle costs (related to corruption and administrative efficiency		Other input costs, such as transport and communication costs to/from and within the host economy and other intermediate products
Social amenities (for example, bilingual schools, quality of life)		Membership in a regional integration agreement conducive to the establishment of regional corporate networks
After-investment services		

Chart 5

(i) *Political Stability*

This factor is essential to attract foreign direct investment because it creates confidence for foreign investors. Political turmoil could wipe out overnight even the most lucrative investments and endanger the lives of personnel. Many investors have paid a heavy price for overlooking or ignoring this factor in other parts of the world. Lack of political stability has been the hallmark of Pakistan during the last eight years (1988-1996). Three elected governments were dismissed on various charges while four caretaker regimes each remained in power for only 90 days over the last eight years. Such a frequent change in government accompanied by abrupt changes in policies and programs are hardly congenial for foreign investors.

(ii) *Law and Order*

An unsatisfactory law and order situation keeps prospective foreign investors on the sidelines. Safety of capital and the security for the personnel engaged in the projects are essential ingredients that govern foreign investment. Unfortunately, Pakistan's law and order situation has remained far from satisfactory in the major growth poles of the country. Karachi, the largest industrial and commercial center and the only commercial port of the country, has been disturbed in varying degrees since 1989. In recent years the law and order situation has also deteriorated in the Punjab province. Notwithstanding attractive incentives offered to foreign investors, this factor has discouraged them to set up their businesses in Pakistan.

In a recent survey, the International Asset Management Company (IAMC), an affiliate of the British-based Morgan Stanley Asset Management, found that the business environment in Pakistan has deteriorated considerably. The IAMC surveyed 115 leading listed and unlisted companies including multinationals operating in Karachi. The sector covered for the survey included automobiles, banks, chemicals, insurance, energy, textile and apparel, financial services and electrical goods. Some 74% of investors answered that they had no investment plan for 1996/1997, while in 1995/1996 some 56% of those had not invested in Pakistan. The key reason for the negative sentiment of businessmen was the deteriorating law and order situation in Karachi. Three out of four businessmen interviewed blamed political instability as the major

constraint facing business today and over 59% of the 115 respondents were not pleased with government policies.

(iii) *Economic Strength*

Investors would not want to invest in a country where the economic fundamentals are so weak that it is unpredictable what the government would do next to prop up a sagging economy. In countries of high economic strength, the investor is assured of a growing of high economic strength, economy, and of increased opportunities for business, as more government development projects and private sector investments put purchasing power in the hands of the people. Increased purchasing power means increased positive multiplier effects on the economy and a source for stability. Furthermore, foreign investors are unlikely to increase their participation in economies that are expected to remain affected by foreign exchange scarcities for several years into the future.

As compared with the decade of the 1980s, Pakistan's macroeconomic imbalances worsened in the 1990s, along with the slowdown of economic activity. Annual average GDP growth slowed from 6.4% in the 1980s, to 3-4% in the 1990s. In particular, large-scale manufacturing has slowed down to 2-3% as against almost 8.0% during the 1980s. The large fiscal deficit has emerged as a major source of macroeconomic imbalances in Pakistan. Slippages on both the revenue and expenditure sides contributed to mounting financial imbalances. The rate of inflation has averaged 11% during the 1990s as against an average rate of 7.3% in the 1980s. Pakistan's external sector also remained under pressure during the 1990s as compared with the 1980s. The current account deficit averaged 4.4% of GDP as against 3.9% during the 1980s. Pakistan's foreign exchange reserves have also fluctuated in an unpredictable manner in the 1990s. Thus, attractive incentives notwithstanding, the large macroeconomic imbalances and slowing down of economic activity must have discouraged FDI in Pakistan.

(iv) *Government Economic Policies*

Pakistan's track record in maintaining consistent economic policies has been poor. The abrupt changes in policies with a change in government as well as a change in policy within the tenure of a government have been quite common. Pressures to raise revenues

(for fiscal consideration), and other conflicting objectives have generally led to inconsistencies in investment and industrialization policies, and an ad hoc and changing incentive system. Revenue measures are not in harmony with the industrial policies. Several instances of change in policy stance in recent years can be identified. For example, the process of privatization slowed down considerably with the change in government. As against the privatization of 63 units in two years (1991/1992 and 1992/1993), only 20 units were privatized in three years (1993/1994 to 1995/1996). Similarly, with the change in government a drastic change was made in the Lahore–Islamabad motorway project. Another example concerns the concessions given to the petroleum and power sectors in terms of duty-free imports of machinery. Resource crunch forced the government to withdraw this concession by imposing a 10% regulatory duty in October 1995. It took several months to get the petroleum sector concession restored but the regulatory duty was re-imposed in the 1996/1997 federal budget. The serious disagreement in 1998 between the GOP and IPPs on the purchase of electricity by the WAPDA aggravated investors' confidence.

The investment approval requirement has been removed but other regulations instituting the need for other administrative approvals, however, are still in place. Numerous permits and clearances from different government agencies at national, regional and local levels still apply to investors.

Incentives/concessions to foreign investment apart, private investors continue to face a plethora of federal, provincial, and local taxes and regulations. Federal levies include custom duties, sales tax, withholding tax at import stage, and excise duty. At the provincial level there are stamp duties, professional taxes, boiler inspection fees, and weight and measures fees. In addition, local government taxes are levied, including a local metropolitan tax, and the Octroi. At the federal and provincial levels, labor taxes have to be paid separately in compliance with labor laws, such as the contributions to the Workers Welfare Fund, Social Security, worker's children's education, and workers participation in profit and group insurance.

In particular, a 5% withholding tax at the import stage as well as restrictions that these firms cannot borrow more than their equity capital have caused serious cash flow problems. Foreign investors in Pakistan also have to cope with a complex legal situation. Law based on different legal systems are applied independently. Uncertainty is exacerbated by the practice of issuing Special Regulatory Orders (SROs) that can

amend or alter existing laws. Over time many SROs have been issued under a particular law, changing its scope and intent.

(v) ***Government Bureaucracy***

This could perhaps be the biggest "burden" in any investment environment. It does not matter how efficient the government thinks its investment policy is; what is critical is the perception of businessmen, especially those already in the country. Do businessmen feel that they have the support of government officials in their efforts to set up and operate efficient business units, or do they feel that they have to fight the government to get projects off the ground?

The general perception of businessmen in Pakistan is that there exists a large gap between the policies and their implementation. The implementation of policies has been slow and the bureaucracy has not responded to the initiatives with conviction. Such perception about the slow implementation of policies is not at all conducive to attracting FDI.

(vi) ***Local Business Environment***

This covers many factors, including the availability of local lawyers, secretarial services, accountants, architects and building contractors, local consultants, etc.—all required both before and during the life of a project. Also, there is the question of the availability of ancillary and supporting industries, their quality, and their cost. Another question would be the availability of suitable joint venture partners, and whether there are lists of potential partners that the investors can choose from. All these conditions are not satisfactory in Pakistan.

(vii) ***Infrastructure***

The availability, reliability, and cost of infrastructure facilities (power, telecommunications, and water supplies) are important ingredients for a business environment conducive to foreign investment. Pakistan compares unfavorably in infrastructure facilities with other developing countries that have attracted higher levels of foreign investment.

Pakistan has only 18% of paved roads in good condition as against 50% in Thailand, 31% in Philippines, and 30% in Indonesia. Pakistan's extensive but poorly managed railway system does not make good for this disadvantage. Telecommunication is another bottleneck: there are only 10 telephones per 1,000 persons in Pakistan compared with 31 and 112 in Thailand and Malaysia, respectively. Pakistan's amount of electricity produced per capita is higher than Indonesia's (435 kWh as against 233 kWh), but is only a fourth of Malaysia's and one half of Thailand.[19] In most cases the urban infrastructure is grossly inadequate.

Only 50% of population have access to safe drinking water as against 81, 72, and 78% for Philippines, Thailand, and Malaysia, respectively.

Karachi Port is six times more expensive than Dubai port (Jebal Ali), three times more expensive than Colombo port, and twice as expensive as Bombay port. While other ports offer goods container terminal facilities, Karachi port cannot even offer priority berthing for container vessels. There are frequent delays and cancellations of berthing and sailing due to obsolete tugs and pilot boats at Karachi port. Moreover, due to the lack of maintenance the berths are unsafe. Karachi port cannot even provide proper container handling equipment and there is a shortage of space and bad planning, resulting in high cost to the consignees. Large vessels cannot come to the port because of the lack of dredging of shipping channels. Moreover, congestion in the hazardous cargo results in containers being detained longer in the barge. All these have made Karachi port much more expensive than ports of neighboring countries (see Table 6 for itemwise costs at Karachi port and other ports of neighboring countries). Such infrastructure deficiencies have discouraged the flow of FDI in Pakistan.

(viii) *Labor Force*

A technically trained, educated, and disciplined labor force along with a country's labor laws are critical factors in attracting foreign investors. Pakistan has an acute shortage of technically trained and educated labor, especially in middle managerial positions and in engineering, which may have discouraged foreign investors. In particular, Pakistan is at a more serious, disadvantaged position in terms of education and health compared with other developing countries that have attracted FDI at much higher levels. Pakistan's adult illiteracy rate is 62% as against 17% for Malaysia, 16% for Indonesia,

5% for Philippines, and 6% for Thailand. Only 80% of primary school age boys are enrolled in school (49% for girls); the lowest rate for the four reference countries is 93% for Malaysia. Pakistan's expenditure on education accounts for only 1.1% of total expenditure as against 10% for Indonesia, 15.9% for Philippines, 21.1% for Thailand, and 20.3% for Malaysia. It also has by far the worst indicators of public health among the five countries. With the general level of education and health care being low, foreign investors may not find the workforce they need.

Besides poor education and health indicators, Pakistan's labor laws are complicated and overprotective, discouraging job creation, inhibiting business expansion, and frightening away much needed productive investment. Such labor laws have created unnecessary labor disputes posing problems for management and causing productivity losses, which have also discouraged foreign investment.

(ix) *Quality of Life*

Quality of life along with cultural and social taboos is critical to attract foreign investors. These factors are less conducive to foreign investors in Pakistan who are accustomed to liberal lifestyles. This is in fact, one of the largest hidden handicaps Pakistan possess against ASEAN countries. Foreign investors find better conditions in Indonesia and Malaysia (both Muslim countries) in the ASEAN region in terms of social life and quality of life.

(x) *Welcoming Attitude*

Have immigration and customs officials at the airports and other entry points been fully briefed about the critical role they play in investment promotion efforts? Their attitudes play an important role in foreign investors decision making. Although the high government officials and business leaders express their enthusiasm in inviting foreign investment, the lack of a cordial environment to accommodate foreigners and foreign investment prevails in Pakistan. The ancillary government agencies and officials seem to have an indifferent and unsympathetic attitude toward foreign investors. The ten checkpoints discussed above constitute an investment environment and can be classified into four factors, namely, cost, convenience, capability, and concessions. All these factors do not appear to be so favorable as in East and Southeast Asian economies.

4.6.2. Economic Effects of FDI

FDI has emerged as not only a major source of much needed capital but is also considered to be a major channel for the access to advanced technologies and intangibles such as organizational and managerial skills and marketing networks by developing countries. Globally, FDI has grown rapidly in recent years, faster than international trade. Developed countries were the key force behind the record FDI flows but developing countries also experienced a spectacular rise in the flows, reaching as high as $150 billion in 1997.

How far have the inflows of FDI affected the level of economic activity in the host countries? This question has been extensively investigated in recent years.

The inflow of FDI can "crowd in" or "crowd out" domestic investment and its effect on saving is ambiguous. FDI has a positive overall effect on economic growth but the magnitude of this effect depends on the stock of human capital available in the host economy. A high positive correlation between aggregate inflows of FDI and the host countries' aggregate exports has been found, while the inflow of FDI tends to increase the host country's imports.

Views, however, diverge regarding the effect of FDI on balance of payments. Critics argue that while the initial impact of an inflow of FDI on the host country's balance of payments is positive, the medium-term impact is often negative, as the investors increase imports of intermediate goods and services and begin to repatriate profit. On the other hand, it is argued that the impact of FDI on the balance of payments depends on the exchange rate regime. Under flexible exchange rates, any disturbance to the balance between supply and demand for foreign exchange is corrected by a movement in the exchange rate. In the case of a fixed exchange rate regime, a net increase in the demand for foreign exchange by the FDI project will result in a reduced surplus or increased deficit in the balance of payments. Empirical evidence suggests that an inflow of FDI has a bigger positive impact on host country exports than on host country imports. Hence, the balance of payments problems, if they do occur, are likely to be small.

What was the impact on Pakistan's imports and exports? First, most empirical research suggests that inflow of FDI tends to increase the host country's imports. One reason is that MNCs often have a high propensity to import intermediate inputs, capital goods,

and services that are not readily available in the host countries. Some studies indicate that the impact of FDI inflow on a host country's imports is either nil or that it slightly reduces the level of imports. If FDI is concentrated in import substitution industries, then it is expected to affect imports negatively because the goods that were imported are now produced in the host country by foreign investors. In order to examine the impact of FDI on Pakistan's imports, we tested an import demand function.

Results suggest that the inflow of FDI increases imports with a lag of one year. The coefficient is statistically significant with a positive sign and suggests that a 10% increase in the inflow of FDI increases imports by 1.8 percent. Income elasticity of import demand is less than unity (0.8) indicating that a 10% increase in real GDP increases imports by 8 percent.

Several studies have found a high positive correlation between the inflow of FDI and the host countries' aggregate exports. Evidence based on sectoral studies indicates that FDI is found often undertaken by companies that are already significant exporters. These findings are supported by studies that have found that foreign-owned firms tend to export a greater proportion of their output than do their locally owned counterparts. Presumably foreign firms typically have a comparative advantage in their knowledge of international markets, in the size and efficiency of their distribution networks, and in their ability to respond quickly to changing patterns of demand in world markets.

There can also be policy-based linkages between FDI and host country exports. Performance requirements that demand MNC affiliates to export a part of their production, and FDI incentives that are limited to or favor export-oriented sectors, are examples of policies that can produce or strengthen a positive correlation between inflows of FDI and exports. A classic example of such policies is export processing zones (EPZs). Many foreign firms have established operations in these zones, which have been set up by the host country government with the goal of stimulating exports, employment, skill upgrading, and technology transfer.

What is the evidence in the case of Pakistan? What is the impact of FDI on Pakistan's exports? To answer these questions, a simplified export function was tested.

The estimated coefficients of FDI are statistically insignificant. This finding suggests that the inflow of FDI has largely been directed toward import-substitution industries or production for the domestic market while little has gone toward export-oriented industries. When these two set of results (both import and export equations) are taken

together, it appears that FDI has worsened the country's trade balance. The inflow of FDI has tended to increase imports more than exports, suggesting deterioration in the trade balance. The income elasticity of exports is considerably higher than unity, suggesting a one percent increase in real income increases exports by 1.38 percent.

The relative price of exports is unit-elastic, suggesting that a one percent increase in relative price reduces exports by one percent.

4.7. Concentrated FDI in the Power Sector

If it is not the "engine of growth", infrastructure is certainly the "wheels" of economic activity. Empirically a strong positive association exists between the availability of certain infrastructure—power, telecommunications, paved roads, and access to safe water— and per capita GDP.

The generally poor performance of state-owned monopolies, combined with the rapid globalization of world economies, has brought into sharp focus the economic costs of inadequate infrastructure and has prompted a growing number of developing countries to take active steps to promote competition, encourage the private sector including foreign investment in infrastructure. Between 1993 and 1995 the estimated private participation in infrastructure rose from $17 billion to $35 billion in developing countries.

In the last decade and a half, growth of population, per capita income, and rapid urbanization have generated a great deal of demand for transport, power, telecommunications, and water in Pakistan.

The supply of these services, on the other hand, has not expanded sufficiently fast to prevent the emergence of gross shortage. Among various infrastructure constraints, power has emerged as the most serious bottleneck constraining the economy's long-term growth and development possibilities.

The rationing of electricity (load-shedding) to metropolitan and industrial areas has become a common feature in Pakistan since the early 1980s and has given rise to social costs (the frustration of household users) as well as economic costs in terms of lost manufacturing output. The Task Force on Energy (1994) noted the loss of industrial

output due to load shedding in the neighborhood of Rs 12 billion. Stone (1995), in a survey of 200 industrial enterprises in Pakistan found that these firms lost an average of 21 workdays a year to electric power shortages alone.

Removing Pakistan's power shortages required a large amount of capital and strong incentives that were beyond the resources and institutional capabilities of the public sector. For example the Govt. of Pakistan is now emphasizing on hydro, and coal power generation alternatives if this is successful Pakistan would be saving $6billion of oil import expenditure, From 1994 to 1996, efforts to rectify power shortages were focused on encouraging domestic and foreign private investors to participate in the generation of electricity. The policy was highly welcomed by foreign investors, mostly from the US and the UK. Two to three years after the initiation of the policy, there are now serious apprehensions about overcapacity and balance of payments implications.

Chapter No. 5

Conclusions, Lessons, and Policy Challenges

5.1.1. Conclusions and Lessons Learned

5.1.2. Policy Recommendations

5.1. Conclusions, Lessons, and Policy Challenges

5.1.1. Conclusions and Lessons Learned

This paper has analyzed the role of infrastructure availability in determining attractiveness of countries for FDI inflows and their export-orientation. We posit that investments by governments in providing efficient physical infrastructural facilities improve the investment climate for FDI by subsidizing the cost of total investment by foreign investors and thus raising the rate of return. MNEs may be particularly sensitive to infrastructure availability for locating their investments designed to feed the global, regional or home country markets as these investments are efficiency-seeking in nature.

The empirical verification of the role of infrastructure availability have been hampered by the lack of a comprehensive indicator of different types of infrastructures. Therefore, a Covariance of infrastructure availability and FDI was constructed capturing measures of transport infrastructure, telecommunications infrastructure, energy availability, etc. The changes in the relative rankings of the 66 sample countries over the 1982-94 period based on the Infrastructure Index made by Mr. N.Kumar in his study Infrastructure Availability, Foreign Direct Investment Inflows and Their Export-orientation, A Cross-Country Exploration, suggest that some countries e.g. South Korea, Thailand, Singapore, Costa Rica and Chile have moved up the ladder by consciously investing in development of investment while others have been left behind. Like Pakistan at 62nd, 63rd, and 62nd place in years 1982-89-94 respectively. The role of covariance in explaining the attractiveness of a country as a host for foreign production by MNEs is evaluated in the framework of correlation between FDI and Infrastructure factors, Which suggests that infrastructure availability does contribute to the relative attractiveness of a country towards FDI by MNEs, holding other factors constant. Furthermore, the export-orientation of production of MNE affiliates, especially when the production is meant for third country markets, was significantly related to infrastructure availability.

Therefore, MNEs' decision-making pertaining to location of product mandates for global or regional markets sourcing is significantly influenced by infrastructure availability considerations. It is clear, therefore, that besides its direct contribution to growth, infrastructure investment contributes to improvement of overall investment climate in the country and helps attract FDI.

These findings suggest that infrastructure development should become an integral part of the strategy to attract FDI inflows in general, and export-oriented production from MNEs in particular. A number of developed and developing country governments have indulged in policy competition between themselves to attract MNEs through investment incentives.

These investment incentives tend to distort the patterns of FDI in favor of developed countries given their capacity to provide substantial fiscal incentives, provided by some developed country governments. Rather than getting sucked into competition with developed countries by offering investment incentives, governments of developing countries would do well to focus on development of physical infrastructure in their countries. This would help to mobilize the domestic as well as foreign investments and help in expediting the process of their development.

In this context, the slackening of public investment in infrastructure development in a number of developing countries, a part of the structural adjustment is a matter of concern. For instance, fiscal adjustment been achieved by squeezing public investment rather than government consumption. Concerns have been raised about the declining budget for key infrastructure sectors such as energy, transport and communications not only in terms of proportion of national income but even in nominal terms. As private investment has not been able to substitute for public investment, the gap between demand and supply of infrastructural services is widening and is threatening to affect the future growth prospects besides discouraging FDI inflows. An implication for the adjustment programmes is that fiscal targeting should be with respect to government (current) expenditure and not with respect to the overall fiscal position. Secondly, lending of multilateral development banks to developing countries should refocus on the infrastructure investment in view of faltering public investment in these sectors. This would not

only make up for declining public investment but would also help to crowd-in foreign and domestic private investment in these sectors.

Foreign direct investment is now perceived in many developing countries as a key source of much needed capital, foreign advanced technology, and managerial skills. Realizing its central importance to economic development, these developing countries have taken wide-ranging steps to liberalize their inward FDI regime and have succeeded in attracting substantial amount of FDI. Within a span of seven years (1990-1997), the inflow of FDI rose from $34 billion to $150 billion, accounting for 37% of world FDI. Before the financial crisis, the Asian countries emerged as the largest FDI recipients with an estimated $87 billion of inflows in 1997, with East and Southeast Asian countries accounting for more than 90 percent. South Asian countries, however, lagged behind considerably compared with their other fellow Asian countries.

Pakistan stands nowhere close to many other Asian countries in attracting FDI. Another major problem facing Pakistan is massive FDI on the power sector following the 1994 power policy. It has invited considerable criticism based on its serious balance of payments implications. The new power policy has resulted in an overcapacity in the power sector under subsequent industrial stagnation. Massive inflows of FDI also gave rise to a huge amount of recurring foreign exchange cost to cover fixed and variable foreign currency expenses. Further, it involves the problem of large cash outflows by IPPs for debt repayments, dividend payments, and fuel payments. With terms and conditions stated in the power policy and the various assumptions made in calculating the balance of payments implications, Pakistan is likely to experience a recurring foreign currency liability of $900 million minimum to $1.4 billion maximum per annum over the next 14 years. This does not seem to be a large amount given Pakistan's foreign exchange reserves of $11-12 billion at present, but when we look at the $ 6 billion yearly import bill of oil and the decreasing foreign remittances the view will change.

Important policy lessons can be drawn from Pakistan's experience as in the case of Pakistan the Govt. is seem to be so desperate for FDI it has allowed the investors to take out any or all of the capital and profit out of the country when ever they want, for other developing countries. First, FDI is not necessarily beneficial to developing countries in the short term if an improper FDI policy is implemented. Second, developing economies should accord their short-term priority to inviting FDI to the foreign-exchange-earning

sector, or at least, both the foreign-exchange-earning sector and other sectors simultaneously. International development organizations, including the Asian Development Bank, must consider this need in their operations particularly build-own-transfer type operations that involve the participation of foreign private investors.

5.1.2. Policy Recommendations

(i) ***General Recommendations***

First of all, Pakistan should make stronger efforts to attract as much FDI as possible to the foreign exchange sectors in the short term. Taking into account unfavorable balance of payments prospects, it should refrain from attracting any further massive FDI in the nonforeign-exchange-earning sectors for some years in the future. Political stability and satisfactory law and order are likewise critical to attract FDI. The international press and media coverage Pakistan has received in recent years is not at all conducive to attracting foreign investors. News items on Pakistan being a nation of hard-line Muslims, and its use of child labor will hardly encourage foreign investors to undertake initiatives in Pakistan. The country's leadership must take practical steps to improve the law and order situation particularly in the major "growth poles" of the country including Karachi. Macroeconomic stability plays a key role in boosting economic growth and restoring foreign investors' confidence on the economy.

In an environment of large fiscal deficit and precarious foreign exchange reserves position, foreign investors are unlikely to increase their participation. Pakistan's fiscal situation and foreign exchange reserves position will remain under considerable strain for some time making the macroeconomic environment less conducive for foreign investors. Some drastic and far-reaching measures are needed to reduce the fiscal deficit on the one hand and raise foreign exchange reserves on the other. Inconsistent economic policies discourage foreign investors in undertaking projects of medium to long-run duration. Several recent examples of inconsistent economic policies pursued by Pakistan have sent wrong signals to foreign investors.

There is a strong perception among foreign investors that the pro-business policies and inducements used to attract prospective new investors are somehow lost in the reality they encounter when they actually begin to set up and operate their business in Pakistan.

Although the investment approval requirement has been removed, numerous permits and clearances from different government agencies at national, regional, and local levels are still applied to foreign investors, causing delays to complete the process. The authorities should streamline administrative procedures regarding approval and official clearances. Foreign investors in Pakistan have to cope with a complex legal situation. Law based on different legal systems are applied independently and it is often not obvious which one will take precedence. The legal situation is even further complicated by the fact that government agencies are empowered to introduce certain changes through administrative orders. The laws and regulations should be simplified, updated, modernized, made more transparent, and their discretionary application must be discouraged.

(ii) ***Specific Recommendations***

Taxes

Payment of taxes and contributions in Pakistan is complex and cumbersome. In addition to corporate income taxes, a large number of indirect taxes are levied at the federal, provincial, and local levels. Essentially, separate collection of taxes and contributions have forced enterprises to face unnecessary, cumbersome, and costly administrative procedures, and to deal with a large number of collecting agencies at all three levels of government. There is an urgent need to reduce the number of taxes and contributions; streamline tax regulations and administrative procedures; and most importantly reduce the contact of foreign firms with a large number of tax and contributions-collecting agencies. The existence of such a large number of taxes and collecting agencies may breed corruption, which adds to the cost of production. Import tariffs on plant and machinery have discouraged investment, more so in Pakistan where capital is scarce and cost of borrowing is high. Because of this high cost, manufacturers are discouraged to modernize and the quality of local industry products is restricted against international competition. There is a need to examine tariffs of plant and machinery with a view to substantially reducing them.

Credit Facilities

Foreign firms operating in Pakistan are currently facing cash flow problems as a result of many taxes and the Asian crisis. That these firms cannot borrow more than their

equity capital have further aggravated the cash flow problem. There is a need to review this policy.

Anti-monopoly Restrictions

The existing monopoly control laws that benchmark the concentration of economic power to an unrealistically low limit of Rs.300 million for assets discourage capital formation The monopoly control authority must review the limit in consultation with the Overseas Investors Chamber of Commerce and Industry in Pakistan.

Labor Laws

Overprotective labor laws do not encourage productivity and frighten away much needed productive investment. There is a need to rationalize the labor laws and multiple levies on employment that inhibit business expansion and job creation. Infrastructure The availability of better quality and more reliable services in all areas of infrastructure are key ingredients of a business environment conducive to foreign investment. In most infrastructure services, Pakistan is highly deficient as compared with many developing countries that have attracted higher levels of foreign investment. If Pakistan wants to catch up gradually with the development of the economies of East and Southeast Asia, it will have to investment more in the areas of education and physical infrastructure. On the education front, the government should identify the nature of skills critical to sustained industrial growth, and formulate strategies, policies, and programs that could facilitate the enhancement of these skills.

In telecoms, the government should expedite the privatization of PTC. In the railway and road sector, government must engage the private sector in leases, concessions, and build operate-transfer (BOT) type contracts. The high cargo handling costs at the Karachi port need to be controlled. Dredging of shipping channels to accommodate large vessels, lowering labor costs, upgrading port handling equipment, and improving documentary procedures need urgent attention.

Confidence-building Measure

The close partnership between the private and public sector is essential to build confidence. In this respect, it is recommended that a forum be established where the private and public sectors could sit together to discuss business promotion-related

issues. The forum must be composed of the prime minister, all the presidents of the national chambers, top businessmen/industrialists, top bankers, as well as heads of overseas chambers of commerce and relevant ministries' secretaries and ministers. The forum may meet regularly to review the economic situation of the country. The problem faced by the business community can be discussed and decisions could be taken immediately. This kind of partnership between the government and private sector will help restore market confidence.

There is a startling gap between current thinking on, allegedly, globalization induced changes in international competition for FDI and the lack of recent empirical evidence on shifts in the relative importance of traditional and nontraditional determinants of FDI in developing countries. We find that surprisingly little has changed so far:

- **Traditional market-related determinants are still dominant factors shaping the distribution of FDI. If at all, the bias of foreign direct investors in favor of large host countries has become stronger, rather than weaker.**
- **Non-traditional determinants such as cost factors, complementary factors of production and openness to trade, though mostly revealing the expected correlation with FDI, have typically not become more important with proceeding globalization.**

This is not to say that policymakers can do little to improve the attractiveness of developing countries to FDI. The availability of local skills has become a relevant pull factor of FDI in the process of globalization. This strengthens the case for human capital formation. Efforts to provide better education and training would not only enhance the economic growth effects of FDI in developing countries, but are also likely to induce higher FDI inflows.

As concerns the much debated interface between trade policy and FDI, we find that the tariff jumping motive for FDI had lost much of its relevance well before globalization became a hotly debated issue. At a cursory look, it may be surprising that some correlations between trade-related variables and FDI turned out to be weaker in recent years. It must be taken into account, however, that the boom of FDI in developing countries in the 1990s was fuelled considerably by FDI in non-traded services. Hence, our results are consistent with Taylor (2000), who found

openness to trade and FDI to be positively correlated in the manufacturing sector only. Developing countries striving for efficiency-seeking FDI in manufacturing are thus well advised to offer an open trade policy environment.

At the same time, the complex relation between openness to trade and FDI hints at one of the shortcomings of our analysis. Similar to most of the existing literature, we dealt with FDI in aggregate terms. However, both the effects and the determinants of FDI are likely to differ between various types of FDI.

Foreign direct investment in infrastructure is a relatively recent phenomenon that presents tremendous opportunities for investors and governments alike. Investment volume in the various infrastructure sectors in developing countries grew dramatically during the 1990s. This resulted in the creation of an entirely new industry of companies now willing not only to supply equipment and services, but to take the commercial risk involved with the operation of facilities for long time periods. Countries that have successfully attracted such investments have generally benefited from substantial efficiency gains and reductions in service charges, while the public budgets of developing country governments could alleviate financial pressures by tapping new sources of capital for major investment programs.

It would be a mistake, however, to think of FDI as just another funding source that governments can tap as part of the traditional public procurement process. Project finance transactions are complex contractual arrangements among a number of different parties with different objectives. Such transactions can work only if the needs of the private sector can be met in an appropriate manner. Lenders and investors will want to be reasonably sure that facilities can be built and owned without undue interference, and that they can be operated in a reasonably predictable environment at a sufficiently attractive rate of return.

Any element in a country's policy framework that jeopardizes these expectations will become a stumbling block for investor consortia, making projects either more expensive or simply impossible because of the increased risk In many developing countries, therefore, the successful implementation of foreign direct investments in infrastructure requires a careful review of the business environment for such investments and, if necessary, reform of the policy framework underlying it. New

institutional structures often need to be designed, laws must be amended or new legislation created and adopted, and regulatory oversight functions must be established and strengthened. Most important, the organization of the existing service provision should be restructured to allow for effective participation and competition by private sector operators.

In short, involving the private sector in a country's infrastructure is not something that can be approached in an *ad hoc* manner. To allow their countries to benefit from new and more efficient investments, governments need to devote substantial effort in designing broad reforms that will sustain an investor-friendly environment. Failure to do so will almost invariably result in lengthy delays in project implementation, cancellation of projects, and frustrated investors abandoning potential projects after having devoted considerable resources to them.

Questionnaire

Q1. Give me some detail about the current level of Foreign Direct Investment in the Country?

Q2. Give me broad detail about the Infrastructure in the Country?

Q3. What is the importance of Infrastructure for a Multi National Enterprise?

Q4. Is the Infrastructure in Pakistan Sufficient to attract a Multi National Enterprise?

Q5. In your opinion what is required when talking of attraction for Multi National enterprises?

Q6. Tell me some thing about the future plans of infrastructure revival?

Q7. Are the policies covering all aspects of Foreign Direct Investment?

Q8. Is the Foreign Direct Investment in Infrastructure one of these areas?

Q9. What are the areas where there is great potential for Foreign Direct Investment?

Q10. What is the need for Imperative studies on Foreign Direct Investment?

Q11. Shouldn't a developing country like Pakistan (which lacks funds required for development of Infrastructure) make it a condition to Multinational enterprises to establish the Infrastructure around them to a certain area?

Q12. Will Pakistan's successful entry to the international capital market reduce its desire or dependency on FDI?

Q13. Pakistan has given incentive to Foreign Investors to take all of their capital as well as profit out of the country at any time. What impact will it have on FDI position?

Q14. Will this step not nullify the desired positive effect of FDI?

Q15. What strategic objective could be behind this incentive?

Q16. Is the rate of FDI inflow in Pakistan according to target? If not what are the possible causes of the failure?

Q17. What are Pakistan's strong points in Competitive global market of FDI?

Q18. What impact, if any, will "Quota free regime" & "WTO" are going to put on Pakistan's attraction for FDI?