Macro-Economic Overview for National Freight and Logistics Policy

Manzil Pakistan is a national non-profit think tank dedicated to developing and advocating public policy that contributes to the development of Pakistan. Our aim is to shape Pakistan to a country where policies on decisions of national interest are driven by non-partisan strategic thinking and implemented through consensus in the best interest of the people of Pakistan.

Introduction & Background

Being an emerging economy and with the prospect of economic activities under the China Pakistan Economic Corridor (CPEC), the country needs a thematic change and complete turnaround in its policy making. There is a need to shift from conventional policy making to a dynamic policy with the inclusion of all emerging sectors. The conventional transport policy of the country was limited to understanding physical infrastructure such as roads, rails, air and sea transport both for passenger and freight. However, with growing magnitude of both domestic and international trade, the logistics sector has gained considerable importance over the last decade or two. Thus, factors like freight, insurance, packaging and storage considered important factors in transport of goods. These also influence the cost of doing business in the country in monetary terms as well as efficiency terms. Inclusion of these sectors in transport policy of the country will make the country more competitive economically. Thus, the shift is highly needed from conventional transport policy to a dynamic 'National Transport and Logistics Policy'.

The transport logistics and Communication sector registered a net contribution of 13.04 percent to the GDP in 201-18, with a share in service sector GDP stood higher at 21.6 percent. The sector registered a growth of 3.58 percent in 2017-18 vis-à-vis 2016-17. In other terms, it is the cost incurred by other sectors on logistics, which in turns very high in the economy like Pakistan (other countries like USA 10 percent, Europe 10 percent, Japan 11 percent, India 13 percent). Following table provide the picture of investments / budgetary allocation to transport sector:

Public Sector Infrastructure Investments / Budgetary Allocations

Rs. In Billion

S. #	Infrastructure	FY14	FY15	FY16	FY17	FY18
1.	Roads	63.04	111.56	159.60	188.00	319.72
2.	Railways	30.97	39.57	41.00	41.00	42.90
3.	Ports	0.50	2.58	12.00	11.58	12.78
4.	Aviation Infrastructure	0.90	1.35	3.90	3.26	4.35

There has been considerable investment in the Transport sector, of which almost 77 percent (on an average) spend on the roads, followed by 18 percent investment in Railways. The remaining 5 percent was distributed in ports (4 percent) and aviation infrastructure (1 percent). The lowest investment in ports and aviation are largely attributed to investments directly implemented by Civil Aviation Authority and Port Authorities on self-finance basis.

Despite investments, global ranking of Pakistan in World Bank Logistics Performance Index (2018) stands at 122 among 160 countries. Previously in 2016 Pakistan was ranked 68 in Index, whereas in 2014 and 2012's ranking it was placed 72 and 71 respectively. The index also provides ranking and score for each of its 6 components, following which countries can map out their performance. Among neighbouring countries (and ports in the region), Pakistan's performance stands below par in 4 out of 6 areas.

World Bank Logistics Performance Index 2018							
Country	**LPI Rank**	**Customs**	**Infrastructure**	**International shipments**	**Logistics competence**	**Tracking & tracing**	**Timeliness**
United Arab Emirates	11	15	10	5	13	13	4
Oman	43	44	39	36	49	66	29
India	44	40	52	44	42	38	52
Iran, Islamic Rep.	64	71	63	79	62	85	60
Sri Lanka	94	79	85	112	109	78	122
Bangladesh	100	121	100	104	102	79	107
Pakistan	122	139	121	97	89	136	136

With the substantial investment in infrastructure and to meet the transport sector targets set in 2025, the government of Pakistan realized the need of National Transport Policy. After concerted effort, the transport policy was developed and approved in May 2018 entitled ***'National Transport Policy of Pakistan 2018'***.

Logistics sector is a critical driver of economic development, which is currently highly unorganized sector in the country. It is important to recognize that without the right regulatory, institutional, financial, commercial and social environment, investment in the logistics sector will not produce economic returns. There is a need to build focus on multimodal infrastructure logistics, thus promotes the efficiency by bringing the higher-value-added services using the intermodal and / or multimodal logistics. The logistics industry requires commercial viability that provide effective, efficient, traceable, and secure freight transport operation in compliance with national and international regulations, otherwise Pakistan will be unable to integrate regionally and globally. Mainly private sectors role is much important in the logistics industry but there is a need to introduce the government role by means of facilitation, regulation and institutional support.

The global Sustainable Development Goals (SDGs) also address the issue of Transport both for passenger and freight. The Goal 9 of SDGs states that

Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all
9.1.2 Passenger and freight volumes, by mode of transport

Sustainable economic development of Pakistan is dependent on a robust and low cost transport and logistics sector. Enhanced export competitiveness also depends on the efficient performance of the 'transport and logistics' sector. The government is aware of the vital role of the sector in the overall economic development and in improving the competitiveness of the export. It is, therefore, committed to implement a comprehensive development initiative for modernising the sector through continues process of reform supported by focused investments in all of its sub-sectors. Under Asian Development Bank's Technical Assistance project-8990, Government of Pakistan through its ministries has formulated Steering Committee for National Freight and Logistics Policy (NTLP). The Committee with its sub-working groups is working on various policy aspects.

Inland Transport

From the perspective of inland domestic freight transport, the road transport and rail transport are considered important modals. Pakistan has a skewed modal transportation mix, largely dominated by freight movement on road, significantly higher than developed economies. The road and roads transport dominate the mix and carry the 96.68 percent of freight traffic in 2017-18. The rest 3.32 percent is the share of rail freight transport, which has declined considerably in the last three decades, however, improved from 2012-13 (1 percent). During the year 2017-18, the train freight registered at 7 million tons improved from 1 million tonnes registered in 2013-14. In 2017-18, the rail transport carried 5.30 billion tonnes-kilometre[1] (BT-km) of freight vis-à-vis 154.5 BT-km of freight by road transport. As per vision 2025, the country is targeting 20 percent share of rail freight transport in overall freight transport.

[1] *Billion-tonnes-kilometer is calculated by weight carried multiplied by number of kilometers.*

Inland Transport Overview (2018)	
1. Roads:	
a. Length of Network (Total)	268,935 km
b. High Type Length of Network (73.4 percent)	197,398 km
c. National Highways and Motorways Length	12,131 km
d. Motor Way Length	2,362 km
2. Railways	
a. Locomotives	481 Nos
b. Route Length	7,791 km
c. Freight Wagons	16,436 Nos
d. Freight Carried in 2016-17	5.6 million tonnes
e. Track	11,881 km
f. Passengers Carried	5.2 million PAX

In terms of road density, Pakistan is far behind, ranking in 60s (2007). The road density is the ratio of length of country's total road network to the country's land area. The road density in 2017-18 recorded at 0.34 km / sq. km (34 km per 100 sq.km)[2], much lower than the target of achieving 0.64 km / sq. km in vision 2025.

The rail transport, once considered as the cheaper and effective, has lost its competitiveness with the road transport due to many reasons. The modal imbalance between road and rail transport create congestions on the road; raising environmental concerns due to pollution; and over-burdening the road infrastructure resulting in damaging the physical infrastructure. This all together increases the inefficiency of the transport models in the country and increases the cost of transportation and economic cost. Transport is considered as the one of the most expensive component of trade logistics, and is very crucial for the trade efficiency. The road transport creates a significant burden on the foreign outflow by means of fuel consumption. It is estimated that about 35 percent of fuel consumption is by the road transport sector.

Pipeline Transport System

Pakistan has entered into regional energy hub, with regional connectivity of freight gas pipelines. Beside this, the national trunk pipeline network has greater significance, the oil, gas and bulk liquid principally transported via pipelines. Existing domestic pipeline connections are established at ports, terminal, refineries, storage depots, dry ports, industrial zones and to periphery of urban areas. There is a need to look into the existing capacities, the current capacity utilization, last-mile connectivity and the future load and extension of these pipelines. During 2016-17, 37.72 percent transportation of crude oil and petroleum products was through pipelines, while 58.35 percent and 3.68 percent was transported through roads and rail transport, respectively.

[2] https://www.nationmaster.com/country-info/stats/Transport/Road-density/Km-of-road-per-100-sq.-km-of-land-area

Inland Water Transport Prospects

There is 30,000 kilometre long network of rivers and perennial canals, which offers excellent opportunity to establish an economical water transport system. Fuel consumption of the inland water transport can be just 10 percent of the road transport, and 25 percent of the rail transport. However, a comprehensive research is needed on the potential for navigation and it's viability for investment in the sector and moving commercial, trade and passenger cargo in the inland water rivers providing direct access to sea as well for access to international movements.

International Trade Cargo Movement & Volume

The bulk of trade and cargo volume in the country is handled by two major ports located in the city of Karachi. Even the operationalization of Gwadar port, more than 95 percent of the imports and exports are handled at Karachi Port Trust (KPT) and Qasim Port. Karachi and Port Qasim ports serves as the primary international gateway ports for all type of commodity shipments, while Gwadar port aims for transhipment and regional transit.

IMPORT CARGO			
Type of Cargo	KPT	QICT	Total Trade
Dry General Cargo	18.58	0.19	18.77
Dry Bulk Cargo	10.06	4.76	14.82
Liquid Bulk Cargo	14.00	17.34	31.35

EXPORT CARGO			
Type of Cargo	KPT	QICT	Total Trade
Dry General Cargo	7.92	0.01	7.93
Dry Bulk Cargo	0.62	0.47	1.09
Liquid Bulk Cargo	1.32	0.17	1.49

TOTAL TRADE	
Type of Cargo	Total Trade
Dry General Cargo	26.70
Dry Bulk Cargo	15.91
Liquid Bulk Cargo	32.83

Data Required for National Freight and Logistics Policy

	Data	Department Responsible(s)
1.	Road networks , Primary/Secondary/tertiary roads • Primary road network (Motorways, NHs etc) • Lengths, cargo and passenger carrying capacity, Capacity Utilization • Up gradation, Ongoing and proposed projects o Expansion plans under CPEC	National Highway Authority / Planning Commission/ Pakistan Bureau of Statistics / / National Transport Research Centre
2.	Railway tracks • Length and track type (Single line, Dual line etc) • Passenger and Cargo carrying capacity • Capacity utilization • Railway yards (Types, capacity and utilization) • Cargo movement (Type of cargo, etc.) • Up gradation of tracks and proposed projects	Pakistan Railways/ Ministry of Communication / / National Transport Research Centre
3.	Oil/Gas Pipeline network • No. of Pipelines • Type of Pipelines • Length of Pipelines (by type) • Capacity of pipelines (by type) • Capacity Utilization in FY18 (by type) • Types of Liquid/Gas transported • Ongoing and proposed projects / planed future extensions o Under CPEC etc.	Planning Commission / Ministry of Energy (Petroleum Division)
4.	Cargo Movements • Sea routes (by most of the cargo from Pakistan moves) • Volume of Export (Sector, commodity, origin {product manufactured in which district} and Destination) • Volume of Import (Sector, commodity, origin and Destination) • PNSC (Capacity and utilization of Bulk/Oil cargo)	Ministry of Maritime Affairs / Ministry of Communication / Ministry of Industries and Production / National Transport Research Centre
5.	Cargo Terminals (Dry, Bulk, liquid and Container) • Existing Cargo Terminals (Nos) both private and public • Capacity of Cargo Terminals by Type • Current Capacity Utilization by Type • Planned Cargo Terminal Construction by Type (Nos and expected capacity increase) • Planned Cargo Terminal under CPEC (Nos and capacity increase)	Ministry of Communication / Ministry of Industries and Production
6.	Trade volume (weight) Domestic/International • Production (Commodity wise and district) • Exports (Commodity, district and destination exported)	Trade Development Authority of Pakistan / Pakistan Bureau of Statistics / Ministry of Industries and Production

	• Import (Commodity, district and destination imported) • Trade Volume expected under CPEC as transit trade • Trade Volume expected from industrial zones envisioned by CPEC	
7.	Major Economic zones (exports / Imports) • Economic Zones (Size, Capacity, utilization and special incentives) • Production (Commodity wise, Contribution in export, any commodity specific incentive) • Import (Commodity wise, Contribution in import, any commodity specific incentive)	Trade Development Authority of Pakistan / Pakistan Bureau of Statistics / Ministry of Industries and Production
8.	Port Infrastructure • Current Capacity by each port • Capacity Utilization by each port • Future expansion Plans • Gwadar Port Master Plan	Ministry of Maritime Affairs / Ministry of Communication
9.	Coal Consumption (Province / City wise) • Overall Coal Consumption (Local and imported) • Coal Usage (District, Local/Imported) • Industries and Locations, using Coal • Projection (Future Demand)	Ministry of Energy (Power Division)
10.	No. of Road Cargo Vehicles Registered in Pakistan • By province • Type of cargo vehicles by Axle Load	Excise and Taxation / National Transport Research Centre
11.	National Trade Policy • Trade Policy for next five years • Trade Projections for next five years	Ministry of Commerce and Textile
12.	China Pakistan Economic Corridor (CPEC) • Future Trade Volume Projection under CPEC • Type of Trade Volumes	Planning Commission / Ministry of Commerce and Textile
13.	**Other Data**	

1- Detailed routes and plans for existing:
   a. Railway tracks, their age and cargo load
   b. Road, high-way, motor-way and express way network plans and their load.
   c. Vessels callings and sea routes on which most of the cargo from Pakistan moves.
   d. Pipeline network

2- Type of cargo movement/freight
   a. Volume of domestic cargo by commodity (inter-city, inter-provincial, and intra-city)
   b. Import/export cargo

3- Details of various modes and capacity of modes of transportation (public & private)

4- Existing Legal and Regulatory Framework for logistics in Pakistan

5- Comprehensive study of current National policies that are in anyway related to the scope of National Logistics and Transport Policy.

Background Paper Outline for National Freight and Logistics Policy

Sustainable Investment, Sustainable Logistics and Sustainable Economic Growth (§ILEG)

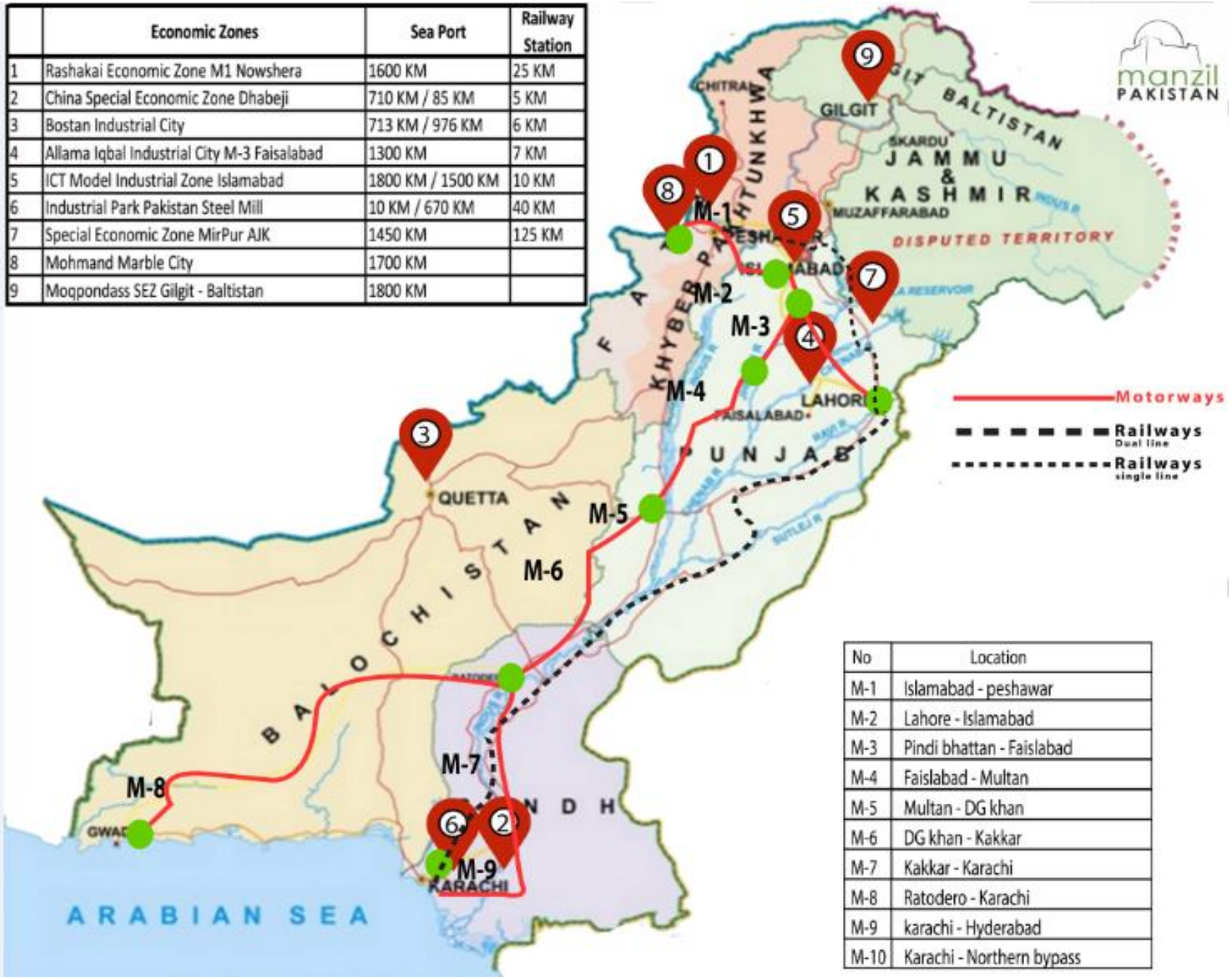
A. Chapter One: Trade Competitiveness & Logistics
   - A-1. Introduction
   - A-2. Trade Competitiveness in Pakistan
     - i. Outlook of Trade Competitiveness
     - ii. Diversification of Exports
   - A-3. Domestic and International Market Access
   - A-4. Role of Logistics in Pakistan's Exports

B. Chapter Two: Existing Regulatory Framework of Logistics Sector in Pakistan
   - B-1. Introduction
   - B-2. Need for Regulatory Framework & Legislations
     - a. Road Transport & Access to Road Transport
     - b. Rail Transport
     - c. Inland Waterway Transport
     - d. Ports & Maritime Transport
   - B-3. Laws and International Conventions on Selected Transport
   - B-4. Multimodal Transport and Freight Forwarding
   - B-5. Existing Institutional Arrangements for Logistics
     - a. Coordination mechanism between government to government (G2G)
     - b. Coordination mechanism between government to business (G2B)

C. Chapter Three: Need for Monitoring and Evaluation Framework for Logistics Sector
   - C-1. Introduction
   - C-2. Approach to Logistics Performance Monitoring
   - C-3. Logistics Performance in Pakistan
   - C-4. Assessing Capacities of Logistics Sector
   - C-5. Logistics Human Resource

CPEC Economic Zones: Distance & Connectivity from Karachi Port (An Illustration)

	Economic Zones	Sea Port	Railway Station
1	Rashakai Economic Zone M1 Nowshera	1600 KM	25 KM
2	China Special Economic Zone Dhabeji	710 KM / 85 KM	5 KM
3	Bostan Industrial City	713 KM / 976 KM	6 KM
4	Allama Iqbal Industrial City M-3 Faisalabad	1300 KM	7 KM
5	ICT Model Industrial Zone Islamabad	1800 KM / 1500 KM	10 KM
6	Industrial Park Pakistan Steel Mill	10 KM / 670 KM	40 KM
7	Special Economic Zone MirPur AJK	1450 KM	125 KM
8	Mohmand Marble City	1700 KM	
9	Moqpondass SEZ Gilgit - Baltistan	1800 KM	



No	Location
M-1	Islamabad - peshawar
M-2	Lahore - Islamabad
M-3	Pindi bhattan - Faislabad
M-4	Faislabad - Multan
M-5	Multan - DG khan
M-6	DG khan - Kakkar
M-7	Kakkar - Karachi
M-8	Ratodero - Karachi
M-9	karachi - Hyderabad
M-10	Karachi - Northern bypass