

GOVERNMENT OF PAKISTAN  
PLANNING AND DEVELOPMENT DIVISION

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**PC - II**  
**PAKISTAN TRANSPORT PLAN STUDY**

( Approved by CDWP in its meeting  
held on 07-07-2003 )

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GOVERNMENT OF PAKISTAN  
PLANNING & DEVELOPMENT DIVISION  
(TRANSPORT & COMMUNICATION SECTION)  
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1. **Name by which survey will be identified:** Pakistan Transport Plan Study
  
2. **Administrative authorities research for:**
  - i) Sponsoring: Planning & Development Division
  - ii) Execution: Transport & Communication Section  
Planning & Development Division
  
3. **Central Ministry Concerned with:**
  - i) Sponsoring: Ministry of Planning & Development
  - ii) Execution: - do -
  
4. **Details of Survey / Feasibility Study:**

(A) General description:

I. **INTRODUCTION:**

Transport is a very important sector of the economy making up for some 10% of the GDP & bears a strong co-relation with development. The transportation system of Pakistan is structured on three principal modes viz. road transport, air transport and rail and while these modes are diverse in nature, they are not mutually exclusive in terms of their role in the overall setup of an economically & technically optimal system. The need for formulating comprehensive plans integrating all the modes of transport is therefore duly recognized, especially from the standpoint of making judicious investments for the development programmes given the overall resource constraint.

JICA an official agency responsible for the implementation of the technical co-operation programmes of the Government of Japan has earlier carried out a study for the National Transport Plan, in coordination with the Planning & Development Division of the Government of Pakistan in which the administrative ministries of the Federal Government, concerned Provincial Departments, executing agencies & the relevant stakeholders were all closely associated. The recommendations of the study which was completed in 1983 were incorporated in the Sixth Five Plan (1983-88) which was then under preparation. This study was updated in 1988 and its recommendations & projections thereof formed the basis of the Seventh Five Year Plan (1988-93). Another updating was carried out in 1995, which served to cross check on the various features of the Eighth Plan which had been prepared by then.

The challenges of the 21<sup>st</sup> century posed by the entire world having shrunk into a global village has necessitated a paradigm shift in the planning process. Realizing the situation Planning Commission has prepared a Ten Year Plan (2000-01 to 2010-11) & two 3 years rolling plans within the framework of this plan. The process of the preparation of the rolling plans is going to be repeated for each successive of the Ten Year Plan. However, in this case the participation of all the relevant agencies could not be realized to the desired extent given the time constraint & other factors. Furthermore the geo-political changes in the region especially with regard to the reconstruction of Afghanistan, the construction of a gas pipeline from Ashikabad to Pakistan via Afghanistan and trade with Central Asia entails an in-depth assessment & determination of the infrastructural which would need to be carried out on this side of the border. The main focus in this respect would be on the international linkages through land transport. This situation merits a detailed & comprehensive study to serve as a reviewing mechanism of the current plans & determination of the future requirements & therefore to this end a request for technical assistance is under process for onward transmission to the Embassy of Japan and JICA.

## II. OBJECTIVE OF THE STUDY:

The purpose of the proposed study is to arrive at a more accurate assessment of the demand for the transport sector for the present as also for the future, by taking stock of the existing situation & ground realities as have developed from the emerging geo-political situation in the region, & by involving all governmental & non-governmental agencies in this respect. The study would also be used to establish a base & system whereby all updating/formulation of future plans could be carried out by the Planning Commission. It would cover the remaining part of the Ten Year Plan (2005-06 to 2010-11) and a 20 years Master Plan for the period from 2005-06 to 2024-25. It would also serve to cross check on the targets, investments & forecasts of the existing Ten Year Plan (2000-01 to 2010-11). The proposed broad features of the study are given as under:

## III. SCOPE OF THE STUDY:

The scope of the study is detailed below:

- (i) **General**
  - (a) Coverage of all modes of transport for the whole of Pakistan with main focus on the national and international trunk routes and inter-regional transport connected with the trunk routes.
  - (b) Coverage of the establishment of a Multi Model transport system in the country which would include the identification of the necessary infrastructural improvements/upgradation necessary for the establishment/functioning of the system.
  - (c) Fixing of environmental parameters to be considered in the preparation & appraisal of projects.
- (ii) **Review and update of the present National Transport System & Plan**
  - (a) Analysis of the existing transport system of Pakistan and identification of the problematic areas.

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- (b) Review of the implementation of the Development/Investment Programmes of the existing Ten Year Medium Term Plan for the period (2003-04 to 2010-11).
  - (c) Review of the demand forecast of the present Medium Term Plan (2003-04 to 2010-2011)
- (iii) **Formulation of the new Investment Programmes**
- (a) Demand forecast for the international trunk, inter-regional and secondary routes routes for the Medium Term plan period (2005-06 to 2010-11) & the 20 years Master Plan period (2005-06 to 2024-25)
  - (b) Inventorisation of all the links & projects alongwith their priority ranking
  - (c) Selection of priority projects for inclusion in the Plans and their phasing for implementation.
  - (d) Cost estimation of the selected projects.
  - (e) Formulation of the Investment Programmes for the Medium Term Plan and the Master Plan and determination of the corresponding investment size.
  - (f) Identification of candidate projects for execution under BOT/BOO arrangement.
  - (g) Identification of the projects required for the establishment of the Multi-Modal Transport System.
- (iv) **Policy Option**

Policy Options shall be spelled out based on the state-of-the-art considerations as applicable to Pakistan in respect of the following: -

- (a) Review of the Planning Strategy in the light of the present trend which is oriented towards the mega projects such as motorways / expressways.
- (b) Independent assessment & assignment of traffic to the road & rail transport modes, based on current form & market trend instead of inter-modal distribution as in the past.
- (c) Financing of investment Plan.

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- (d) Recovery of costs.
  - (e) Maintenance practices / policies for transport infrastructure.
  - (f) Managerial (manpower training) requirements for construction, operation and maintenance of the transportation infrastructure.
  - (g) Institutional requirement of R&D for transport.
  - (h) Role of the private sector in various aspects of transportation alongwith detailed analysis regarding lack of interest of the Private Sector to invest in road / rail projects / services or operations & recommendation for encouragement of the private sector participation.
  - (i) Introduction of the concept of Multimodal Transport including among others containerization keeping in view the traffic potential of Central Asian States and the reconstruction work in Afghanistan.
  - (j) Indepth assessment of transportation / trade logistics including movement of goods to / from ports and potential of suitable vehicles to carry container and bonded cargo.
  - (k) Exploration of the possibility to organize efficient and modern cargo transportation system and physical distribution of goods between/within cities on the lines established in the developed world like Japan.
  - (l) Review of the Environmental Impact Assessment criteria ensuring integration of environment and economic elements in quantitative terms at the appraisal stage of transport projects.
  - (m) Formulation of recommendations for the role of transport in the fields of employment generation and poverty alleviation.
  - (n) Establishment of a data base & computerized system within the Transport & Communications Section of the Planning Commission whereby all future updating/formulation of Plans could be carried out by the Section itself, without recourse to any external assistance, as has been happening so far.

## V. UNDERTAKING BY THE GOVERNMENT OF PAKISTAN

- (i) The Government of Pakistan shall take necessary measures to facilitate the carrying out of the Study as detailed below:-
  - (a) Secure the safety of Japanese Study Team (hereinafter referred to as the Team).
  - (b) Secure permission for entry into the transport related agencies / areas essential for the conduct of the Study.
  - (c) Secure permission for the Team to take copies of all data and documents, including photographs, (excluding restricted material) related to the Study out of Pakistan to Japan by the Team.
- (ii) Ministry of Planning and Development shall act as the counterpart agency to the Team & also as the coordinating body in relation to other governmental and non-governmental organizations concerned, for the smooth conduct of the Study. The qualification of the counterpart staff may be seen at Annexure-V.
- (iii) Ministry of Planning and Development shall, at their own expense, provide the Team with the following, in cooperation with other relevant organizations:-
  - (a) Available data and information related to the study.
  - (b) Counterpart personals.
  - (c) Transport, manpower, office accommodation and other office equipment required for the carrying out of the study in Islamabad.

## VI. CONTRIBUTION OF THE GOVERNMENT OF JAPAN:

JICA shall take the following measures for the implementation of the Study:-

- (a) Dispatch, at its own expense, study teams to Pakistan.
- (b) Provide technology transfer including software training used in the Study to the Pakistani counterpart persons in the course of the Study.

- (c) Propose training facilities (short/long term) for the persons involved in the Study or in the Federal Ministries concerned. The training shall include necessary short domestic & foreign visits for the concerned officers.
- (d) Propose specialized equipment / software necessary for field data collection analysis and future updating.
- (e) Other related assistance.

(B) **Justification:**

Since the inception of Pakistan, two major studies have been carried out namely the TCI Report and the TRACO Report, to plan the transportation system in the country on a rational basis. The first study was carried out by the Transport Consultant International on behalf of the US Army corps of engineers in 1960-62. The second study was conducted in 1970-71 under the World Bank Loan, and was limited to the main system, parts of railway and roads.

Twelve years following the TRACO (Transport co-ordination) study the NTPS (National Transport Plan Study) was carried out by the JICA in May 1983. It was updated twice first in 1988 and then in 1995. The recommendations of NTPS were generally incorporated in the preparation of the Five Year Plans viz Sixth & Seventh Plans. The NTPS updated in 1995 provided investment proposals / projects for the improvement / development of transport infrastructure, transport operations and management, including traffic data and other transport statistics. However, these have since become outdated, & there is therefore a strong need to carry out a fresh study that would allow for the real situation on ground as accruing from the emerging new geo-political regional situation as detailed below to be taken into account:-

- (a) The Planning strategy has since changed and the emphasis is now on going in for large mega road projects such as expressways and motorways.
- (b) Efforts made in the past for greater participation of the private sector in the development programmes either through perpetual franchise rights or concession for a certain period of time have not met with



any worthwhile success. As such a detailed analysis is warranted to come up with fresh ideas & approach.

- (c) The Road O-D survey was last conducted by the NTRC in 1989-90 and JICA updated the data for the 1995 NTPS study. Since then the traffic trend, overloading practices and vehicle composition have changed substantially.
- (d) The concept of multi-modal transport including containerization which is gaining importance in the country, especially in view of the traffic potential of the Central Asian States as also the reconstruction in Afghanistan and trade with the Central Asia would need to be studied in detail & the requisite infrastructural development that would be required domestically identified.
- (e) Transportation / Trade logistics need to be reviewed / examined in-depth which would include the movements of goods to and from the port, custom procedures, management practices, transit delays and shortage of suitable vehicles to carry container and limited number of bonded cargo.
- (f) Japan has established a well organized and efficient modern cargo transportation system and physical distribution of goods between and within cities. Considering the Japanese experience, the possibility of introducing modernized cargo transportation system responsive to the demands of efficient collection / distribution and deliveries of goods (both imports & exports) in Pakistan should be explored.
- (g) The new transport facilities such as roads, railway lines, airports, etc. have adverse environmental impact. Similarly, vehicular pollution cause serious health hazard. The Environmental Impact Assessment should be enforced to ensure integration of environmental and economic elements in at the appraisal stage of transport projects.
- (h) Transport plays a key role in generation of employment & poverty alleviation as it provides access to basic health, education and other social facilities and increases per capita earning by reducing the transportation cost which requires to be studied in detail. There is a

need to consider issues such as the adverse effects of changes in the general transport policies and programs on poor people and remedial measures in terms of minimizing the amount of resettlement, greater and safer use of non-motorized transport and initiating construction and maintenance of cost-effective / labour-intensive road projects in rural areas.

Keeping in view the explanation / justification mentioned above, it is imperative that a fresh medium & long term study be carried out.

C) **Month of commencement and Completion (give details of Phasing).**

Commencement - 2003-04  
Completion - 2004-05  
(Please see Annex-I).

D) **Estimated Cost**

(Rs. Million)

Year	Local	FEC	Total
1	10.8	14.00	24.8
2	3.9	10.00	13.9
Total	14.7	24.00	38.7

Note: FEC will be borne by the Government of Japan as grant. It is estimated to be at least Rs 24 million. This is however an indicative figure. Break down of the local cost may be seen at Annex-I to Annex-IV.

E) i) **Personnel required**

<u>Category</u>	<u>Number</u>	<u>Pakistani</u>	<u>Foreign</u>
Supporting Staff	20	20	-
Consultants	10-15	-	10 - 15

ii) **Period of contract**

24 months for both Pakistani and Foreign Personnel

F) The estimate of cost are based on the latest market prices.

G) **Mode of Financing**

Provision of Rs 10.8 million has been proposed for the study in the PSDP 2003-04. Foreign exchange financing will all be borne as a grant by the Government of Japan.

Prepared By:-

Chief  
Transport & Communication Section  
Planning & Development Division  
Government of Pakistan  
Islamabad

Approved By:-

Secretary  
Government of Pakistan  
Planning & Development Division  
Government of Pakistan  
Islamabad

**ANNEX-I**

**SUMMARY  
PHASING OF EXPENDITURE**

ITEMS	(Rupees)		
	2003-04	2004-05	TOTAL
A. STAFF	2,024,000	2,024,000	4,048,000
B. FURNITURE & FIXTURE	2,827,600	787,600	3,615,200
C. OTHER ITEMS	5,000,000	1,376,000	6,376,000
TOTAL	10,851,600	3,187,600	14,039,200
D. CONTINGENCIES @ 5%	542,580	159,380	701,960
GRANT TOTAL	11,394,180	3,346,980	14,741,160

SAY RS. (MILLION)

11.4

3.3

14.7

ANNEX-II

A. STAFF

(Rupees)

S.NO.	DESIGNATION	PAY Rs/m	STRENGTH	2003-04	2004-05	TOTAL
1.	PROJECT COORDINATOR	45,000	1	540,000	540,000	1,080,000
2.	DEPUTY PROJECT COORDINATOR	38,000	1	456,000	456,000	912,000
3.	ACCOUNTANT	25,000	1	300,000	300,000	600,000
4.	ASSISTANT	15,000	1	180,000	180,000	360,000
5.	UDC	6,000	2	124,000	124,000	248,000
6.	DRIVER	4,500	4	216,000	216,000	432,000
7.	N'QASID/CHOWKIDAR	4,500	2	108,000	108,000	216,000
8.	HONORARIUM	-		100,000	100,000	200,000
	TOTAL			2,024,000	2,024,000	4,048,000

ANNEX-III

B. FURNITURE & EQUIPMENT

(Rupees)

S.No.	ITEMS	2003-04	2004-05	TOTAL
1.	SPACE REQUIREMENT (a) Local Staff (b) Foreigners	183,600 204,000	183,600 204,000	367,200 408,000
2.	PARTITION & FURNISHING	1,000,000	-	1,000,000
3.	UTILITIES	400,000	400,000	800,000
4.	COMPUTER & PRINTER (5)	300,000	-	300,000
5.	PLAIN PAPER COPIER (1)	300,000	-	300,000
6.	AIRCONDITIONERS (6)	210,000	-	210,000
7.	GAS HEATERS (06)	30,000	-	30,000
8.	OTHER MISC. EQUIPMENT INCLUDING FAX, SCANNER, BINDING MACHINE AND CUTTER ETC.	200,000	-	200,000
	TOTAL	2,827,600	787,600	3,615,200

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**PROPOSED CLARIFICATION OF THE  
COUNTERPART COORDINATING STAFF**

**A. Project Coordinator**

B.Sc Engineering Civil or Electrical with a minimum of 20 year experience in Transportation Planning including Highways, Railways, Air Transport and Ports and Shipping.

OR

M.Sc Civil/Transportation Engineering with B.Sc Civil or Electrical Engineering and a minimum experience of 20 years in the above disciplines.

OR

Ph.D in Transportation Engineering with B.Sc Civil or Electrical Engineering and a minimum experience of 10 years in the above disciplines.

OR

M.A. Economics with Post Masters diploma in Transport Economics and a minimum of 20 years experience in any field of transport.

**B. Deputy Project Coordinator**

M.Sc Transportation Engineering with B.Sc Engineering Civil/Electrical and minimum of 10 year experience in the disciplines mentioned in "A" above.

OR

M.A. Economics with Post Masters diploma in Transport Economics and a minimum of 15 years experience in the disciplines indicated in "A" above.

**C. Accountant**

B.A. in any subject with a minimum experience of 15 years in Accounts (Programming, Drawing/Disbursement works).

**D. Assistant**

B.A. in any subject with a minimum of 15 years experience in office work.