

Revised 2005

PC-1 FORM

**GOVERNMENT OF PAKISTAN
PLANNING COMMISSION**

**PROFORMA FOR DEVELOPMENT PROJECTS
(INFRASTRUCTURE SECTORS)**

- **Transport & Communication**
- **Telecommunication**
- **Information Technology**
- **Energy (Fuel & Power)**
- **Housing, Government Buildings &
Town Planning**
- **Irrigation, Drainage & Flood Control**

**GOVERNMENT OF PAKISTAN
PLANNING COMMISSION
PC-1 FORM
(INFRASTRUCTURE SECTORS)**

- 1. Name of the project**
- 2. Location**
- 3. Authorities responsible for:**
 - i. Sponsoring**
 - ii. Execution**
 - iii. Operation and maintenance**
 - iv. Concerned federal ministry**
- 4. Plan provision**
- 5. Project objectives and its relationship with sector objectives**
- 6. Description, justification, technical parameters and technology transfer aspects (enclose feasibility study for projects costing Rs. 300 million and above)**
- 7. Capital cost estimates**
- 8. Annual operating and maintenance cost after completion of the project**
- 9. Demand and supply analysis**
- 10. Financial plan and mode of financing**
- 11. Project benefits and analysis**
 - i) Financial**
 - ii) Economic**
 - iii) Social benefits with indicators**
 - iv) Employment generation (direct and indirect)**
 - v) Environmental impact**
 - vi) Impact of delays on project cost and viability**

12. **Implementation schedule**
13. **Management structure and manpower requirements including specialized skills during construction and operational phases**
14. **Additional projects/decisions required to maximize socio-economic benefits from the proposed project**
15. **Certified that the project proposal has been prepared on the basis of instructions provided by the Planning Commission for the preparation of PC-I for Infrastructure sector projects.**

**Prepared by _____
Name, Designation & Phone #**

**Checked by _____
Name, Designation & Phone #**

**Approved by _____
Name, Designation & Phone #**

**GOVERNMENT OF PAKISTAN
PLANNING COMMISSION**

Instructions to Fill-in PC-I Proforma(Infrastructure Sectors)

1. Name of the Project

Indicate name of the project.

2. Location

- **Provide name of the district/province.**
- **Attach a map of the area, clearly indicating the project location.**

3. Authorities responsible for

Indicate name of the agency responsible for sponsoring, execution, operation and maintenance. For provincial projects, name of the concerned federal ministry be provided.

4. (a) Plan provision

- **If the project is included in the medium term/five year plan, specify actual allocation.**
- **If not included in the current plan, what warrants its inclusion and how is it now proposed to be accommodated.**
- **If the project is proposed to be financed out of block provision, indicate:**

Total block provision	Amount already committed	Amount proposed for this project	Balance available
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(b) Provision in the current year PSDP/ADP

5. Project Objectives

- **The objectives of the sector/sub sector as indicated in the medium term/five year plan be reproduced. Indicate objectives of the project and develop a linkage between the proposed project and sectoral objectives.**
- **In case of revised Projects, indicate objectives of the project if different from original PC-I.**

6. Description and Justification of Project (enclose feasibility study for projects costing Rs.300 million & above.)

- Describe the project and indicate existing facilities in the area and justify the establishment of the Project.
- Provide technical parameters i.e. input and output of the project. `Also discuss technological aspect of the project.
- Provide details of civil works, equipment, machinery and other physical facilities required for the project.
- Indicate governance issues of the sector relevant to the project and strategy to resolve them.

In addition to above, the following sector specific information be provided

Transport & Communication

- Provide technical parameters i.e. selected design features and capacity of the proposed facilities alongwith alternates available.
- For roads, provide information regarding land width, geometric and pavement design including formation width, pavement width.
- Land classification for bridges and culverts.
- Thickness/width of road way on bridges and culverts.
- Design speed, traffic capacity of road in terms of passenger car units per day.
- Saving in distance for diverted traffic. Average daily traffic of motor vehicles by category as well as the car units be provided.
- In case of improvement within the urban areas, separate traffic counts within that area should be given. Brief information regarding traffic and pavement width etc. in adjoining sections should also be given.
- For bridges provide location, total length of bridge, number of spans with length of each span, width roadway and footpath, type of sub and superstructure and load classification.

Telecommunication

- **Mention alternate means of providing the same facilities (for example microwaves versus optic fiber cable, underground cable versus overhead cable etc.) and the cost of each of the alternatives means.**

Information Technology

- **Provide Hardware specification**
- **Attach Networking/LAN diagram**
- **Software requirements**
- **Availability of services (DSL, Dial-ups, wireless)**

Energy (Fuel & Power)

Fuel

- **Detailed description of major equipments, items and structure.**
- **Provide basis of design of the project.**
- **Indicate alternate technology alongwith the selected one with justification.**
- **For exploration projects give details of previously work undertaken.**

Power

- **Give detailed description of major equipment and structure.**
- **For Hydroelectric projects: Give information regarding geological investigations, flow duration curve, water storage, estimated monthly kilowatt hours generation under minimum and average flow conditions and the flow conditions assumed in the project and operational regime i.e. base load or peak load plant. Rainfall record, stream flow calculation, hydrograph and other available water data alongwith siltation problems be provided.**
- **For thermal projects: Give information on sources and availability of cooling water and fuel, calorific value, heat rate price (with custom duties and taxes shown separately) and disposal of ash and effluents.**
- **Give a comprehensive, comparison of available technology and rationale/criteria for selection of specified technology.**
- **Provide analysis of adopted technology with respect to existing system.**

- Indicate whether maintenance facilities are available. If not, provide details/plans for maintenance facilities.
- **For transmission and distribution system:** Basis of design voltage drop allowance system stability, reliability, operating voltage, policy regarding reserves, design and material to be used for supporting structure, average span length and conductor size, type of spacing.
- Load flow studies for the year in which plant is proposed to be commissioned and five years thereafter.
- **For sub-stations and switching stations:** Give location and purpose of each station KVA voltage, type and structure, number of circuits, type of transformers and major circuit breakers.
- Load conditions of the existing facilities, in case of extension facilities.
- In case of new projects, loading conditions of sub stations be provided.

Housing, government buildings & town planning

- Provide alternate designs and proposed design features of the project, keeping in view the income levels, family size of the population to be served alongwith weather conditions etc.
- Mention the nature and size of land available and indicate whether the design ensures the most economical use of space.
- Indicate whether the project is in consonance with the master plan of the city.
- Town Planning and covered area parameters/space standards applied in determining land and flood area requirements.
- Specifications of the civil works.

Irrigation, drainage and flood control

- Provide project areas characteristics in terms of population, climate, geology, soil, irrigation, ground water, drainage and agriculture (crops, yields etc.)
- For multipurpose projects, provide basis of allocation of costs between different purposes.
- Engineering projects be supported by technical background data and each distinct segment of the project be described separately.

7. Capital cost estimates

- Indicate date of estimation of Project cost.
- Basis of determining the capital cost be provided. It includes market survey, schedule rates, estimation on the basis of previous work done etc.
- Provide year-wise estimation of physical activities as per following:

Year-wise/component-wise physical activities

Items	Unit	Year-I	Year-II	Year-III
A.				
B.				
C.				

- Phasing of capital cost be worked out on the basis of each item of work as stated above and provide as per following:

Year-wise/component-wise financial phasing

(Million Rs)

	Item	Year-I			Year-II			Year-III			Total		
		Total	Local	FEC	Total	Local	FEC	Total	Local	FEC	Total	Local	FEC
	A.												
	B.												
	C.												
	Total												

In case of revised projects, provide

- History of project approval, year-wise PSDP allocation, releases and expenditure.
- Item-wise, year-wise actual expenditure and Physical progress.
- Justification for revision of PC-I and variation in scope of project if applicable.
- Item-wise comparison of revised cost with the approved cost and give reasons for variation.
- Exchange rate used to work out FEC in the original and revised PC-I's.

8. Annual Operating Cost

Item-wise annual operating cost based on proposed capacity utilization be worked out for 5 years and sources of its financing.

9. Demand and supply analysis

- Existing capacity of services and its supply/demand
- Projected demand for 10 years.
- Capacity of the projects being implemented in public/private sector.
- Supply – demand gap.
- Designed capacity and output of the proposed project.

10. Financial Plan

Sources of financing

(a) Equity:

Indicate the amount of equity to be financed from each source

- Sponsors own resources
- Federal government
- Provincial government
- DFI's/banks
- General public
- Foreign equity
- NGO's/beneficiaries
- Others

b) Debt

Indicate the local & foreign debt, interest rate, grace period and repayment period for each loan separately. The loan repayment schedule be also annexed.

c) Grants along with sources

d) Weighted cost of capital

11. Benefits of the project and analysis

- **Financial:** Income to the Project alongwith assumptions
- **Economic:** Benefit to the economy alongwith assumptions
- **Social:** Benefits with indicators
- **Environmental:** Environmental impact assessment negative/positive

Financial/Economic Analysis(wih assumptions)

- **Financial analysis**
 - Quantifiable output of the project
 - Profit and loss account and Cash Flow statement
 - Net present value (NPV) and Benefit Cost Ratio
 - Internal financial rate of return (IFRR)
 - Unit cost analysis
 - Break even Point (BEP)
 - Payback period
 - Return on equity (ROE)
- **Economic analysis**
 - Provide taxes & duties separately in the capital and operating cost
 - Net present value (NPV) and benefit cost ratio (BCR)
 - Internal economic rate of Return (IERR)
- **Employment analysis**
 - Employment generation (direct and indirect)
- **Sensitivity analysis**
 - Impact of delays on project cost and viability

12. Implementation Schedule

- Indicate starting and completion date of the project
- Item-wise/year-wise implementation schedule in line chart correlated with the phasing of physical activities.

13. Management Structure and Manpower Requirements

- Administrative arrangements for implementation of project.
- The manpower requirements by skills during execution and operation of the project be provided.
- The job description, qualification, experience, age and salary of each post be provided.

14. Additional projects/decisions required

- Indicate additional projects/decisions required to optimize the investment being undertaken on the project

15. Certificate

- The name, designation and Phone # of the officer responsible for preparing and checking be provided. It may also be confirmed that PC-I has been prepared as per guidelines issued by the Planning Commission for the preparation of PC-I for Infrastructure Sector projects.
- The PC-I alongwith certificate must be signed by the Principal Accounting Officer to ensure its ownership.