



Guidelines for Environmental Screening of Public Sector Projects For Planning and Development Department GOVERNMENT OF BALOCHISTAN

Developed by IUCN Balochistan Programme

The World Conservation Union



1. Introduction

The National Environmental Policy describes integration of environment into development planning through implementation of Environmental Impact Assessment (EIA) at project level and promotion of strategic environmental assessment (SEA) as a tool for integrating environment into decision-making. A significant change was integration of environmental concerns in the planning process of the public sector development schemes by assessing the environmental impacts was initiated after ECNEC's decision in its meeting held on 24 July, 2004. This was followed by addition of a section on EIA in the project initiation Performa of Planning Commission (PC-I) as Part-D. But unfortunately, this Part-D on EIA remained ineffective due to various reasons, mainly due to lack of capacity and coordination between EPA and P&D. The Planning Commission of Pakistan has recently revised the PC-I Proforma. In this revision, sectoral segregation has been revived and individual PC I Proforma for Infrastructure, Production and Social sectors and the Part-D on EIA has been deleted. But still the public sector projects are not exempted from EIA. In the revised proformae, environmental impacts are included under project benefits and analysis.

Once a proposal for a development project is submitted for approval, it is the responsibility of approving authority (P&D) to screen out whether this project (PC-I) would need an Initial Environmental Examination (IEE) or an EIA. Similarly, in case of feasibility and surveys (PC-II), necessary to conduct prior to develop a PC-I it is also the responsibility of P&D to ensure that the environmental impacts is needed and if needed, the cost has been included in the budget estimates. Therefore, the relevant staff at P&D Department lacks some ready reference helping tool for environmental screening of projects and needs technical assistance and capacity building. Planning and Development (P&D) Department of Government of Balochistan requested the IUCN Balochistan Programme to provide technical assistance in developing guidelines for environmental screening of public sector projects to ensure compliance with section 12 of *Pakistan Environmental Protection Act, 1997* by assessing the environmental impacts of the projects.

Institutional capacity building is one of the prerequisites of sustainable development in Pakistan and is IUCN's key approach towards programme implementation by providing technical assistance within the framework of Balochistan Conservation Strategy (BCS) developed by the Government of Balochistan with the technical assistance from IUCN and financial support from Royal Netherlands Embassy in Pakistan in the year 2000. Therefore, IUCN Balochistan Programme developed these guidelines for environmental screening of public sector projects by the Planning & Development Department of Government of Balochistan in order to strengthen the EIA system.

2. Purpose and need

The Government of Balochistan have also developed BCS with technical from IUCN and it has been felt that capacity development will be needed at the individual and institutional levels for implementation of BCS. At the same time development of sustainable institutional instruments and mechanisms of implementation in the line departments is also of importance. Integration of

environment in the planning process is such an important element for sustainable development so that any effort in development of tools and mechanism in this regard will be of great help.

3. Background

The Environment Section in the Planning and Development (P&D) Division of the Planning Commission of Pakistan was established in 1993 along with its corresponding Environment Section in Planning & Development Departments of Provincial Governments with the mandate to ensure that environmental concerns are addressed at the policy, planning, project conceptualisation and approval stages. The Environment Sections are mandated to formulate and review policies related to environment, Medium Term Development Frameworks (MTDF) and to conduct mid-term reviews. The Environment Sections are also mandated to hold annual planning, training, research and project screening exercises.

Poor co-ordination and communication between various public sector institutions has led to duplication and overlapping of work. For example, according to clause (c) of section 4 of the Policy and procedures for the filing, review and approval of environmental assessments prescribed by Pak-EPA in Pakistan Environmental Assessment Procedures of 1997, "the responsibility of IEE management and review, and granting or refusing environmental approval will be vested in the departments at federal and provincial level responsible for economic and development planning (referred to as P&Ds)". The Environment Section in the Planning and Development Division do the environmental screening and again send the PC-I of the projects for issuance of environmental approval, which duplicates the function of reviewing an IEE. The Pak-EPA's stance is that they are already over-burdened and lack human resource for reviewing such an enormous number of PC-I documents, that is why P&D should perform this duty. The P&D says that they are not authorised by PEPA of 1997 and their role has not been even specified in the Pak-EPA (Review of IEE/EIA) Regulations of 2000, how they can accord environmental approval. The result is that the public sector projects are being executed with out environmental approvals.

In Government of Balochistan, no PC-I is sent to Environment Section for environmental screening, only PC-I initiated from Environment Department is sent to them similar to that from other departments are sent to respective section in P&D. The reason is again that the Environment Section lacks capacity to do so, therefore, no PC-I is gone under environmental screening and according to Balochistan EPA, so far not a single PC-I has been sent for environmental approval to EPA since the promulgation of PEPA, 1997.

The responsibility of environmental screening of public sector projects rests with the Planning and Development Department of GoB, which has established an Environment Sections for environmental screening of the project proposals submitted for approval for funding from the public sector development funds. But the Environment Section in the Planning and Development Department is ineffective by all standards. It lacks capacity of all kinds and do not perform any environmental screening. The powers to implement the PEPA, 1997 through monitoring and enforcement of the environmental regulations have been delegated to the Balochistan Environmental Protection Agency (BEPA). They can only accord environmental approval on the basis of an IEE or EIA conducted in accordance with prescribed procedures.

5. Objectives

The overarching aim of developing these guidelines is the institutional capacity building of Government of Balochistan for implementing Balochistan Conservation Strategy by promoting environmentally sound development planning. Providing ready reference environmental screening tool to P&D Department for strengthening EIA system is the specific objective.

6. Methodology

An initial need assessment was carried out by holding meeting with the relevant staff of the Planning and Development Department of Government of Balochistan in order to identify the needs for environmental screening. Then IUCN Balochistan Programme was formally requested by the P&D Department to provide technical assistance for developing guidelines as tool for environmental screening of public sector projects.

On the basis of the issues appraised, some guidelines to assess the various components were chalked out. Meanwhile, the Planning Commission revised the PC-I and Part-D was deleted from the PC-I proforma, which altered the scope of the of the appraisal meetings were held with the Chief Economist, Joint Chief Economist, and Section Head of Environment Section. Initial draft was shared with them and their feedback was recorded. The P&D requested to send the final draft for their comments and feedback. Meetings were also held with staff of the Environment Section in Planning Commission for their views on some issues related to policy matters.

Sector-wise segregated newly developed PC-I Performae of Planning Commission along with the appended instructions to fill the proformae were analysed in the environmental context. The Schedule I and II of Pak-EPA (Review of IEE/EIA) Regulations, 2000 were compared with the sectoral segregation of projects by Planning Commission. For primary level screening, projects listed in Schedule I and II of IEE/EIA Regulations were organized according to Planning Commission's classification of projects. In the second step, secondary level screening tools will also be developed.

7. How to use?

The primary environmental screening of the project PC-Is will be on the basis of *Pak-EPA (Review of IEE/EIA) Regulations, 2000* as this is the key instrument for implementation Section 12 of *Pakistan Environmental Protection Act* of 1997.

The Planning Commission of Pakistan has recently revised the PC-I Proforma. In this revision, sectoral segregation has been revived and individual PC I Proforma for Infrastructure (Appendix-I), Production (Appendix-II) and Social (Appendix-III) sectors has been notified in late 2005.

Step 1: Project PC-I first should be looked at for its sector.

- Step 2: Project title at Sr. No.1 of PC-I should be looked at.
- Step 3: Project capital cost at Sr. No.7 of PC-I should be looked at.
- *Step 4:* Then both these information should be used to confirm from the list of respective sector's list whether an IEE is required or EIA is needed.
- **Result:** Initial decision whether the projects need an initial environmental examination (IEE) or Environmental Impact Assessment (EIA) can be made on the basis of this information.

8. What is needed?

There is a need for developing departmental/institutional mechanism for environmental screening of project proposal before approval. In order to comply with section 12 of *Pakistan Environmental Protection Act, 1997* the ECNEC in its meeting held on 27th July 2004 decided that:

"in case of development projects having environmental implication, an environmental impact assessment (EIA) report should invariably be submitted along with the project document at the time of getting approval".

Therefore, it is important the all the project PC-I should be screened by the Environment Section of P&D Department of Balochistan Government prior to placing these before the approving authority or recommending to higher authority.

9. Sectoral segregation of the projects PC-Is

The PC-I will fall in one of the main sectors and each sector is comprised of the sub-sector listed under each sectoral PC-I. A checklist has been made corresponding to each sector.

I. PC-I for Infrastructure Sector- List I

- 1. Transport & Communication
- 2. Telecommunication
- 3. Information Technology
- 4. Energy (Fuel & Power)
- 5. Housing, Government Buildings & Town Planning
- 6. Irrigation, Drainage & Flood Control

II. PC-I for Production Sector- List II

- 1. Agriculture Production
- 2. Agriculture Extension
- 3. Industries, Commerce and Minerals

III. PC-I for Social Sector-

List III

- 1. Education, Training and Manpower
- 2. Health, Nutrition, Family Planning & Social Welfare
- 3. Science & Technology
- 4. Water Supply & Sewerage
- 5. Culture, Sports, Tourism & Youth

- 6. Mass Media
- 7. Governance
- 8. Research

List I. Infrastructure Development

i. Transport & Communication

- Railway works EIA required
- Air ports EIA required
- Road & Highways If cost is > Rs. 50 million EIA if cost is < Rs. 50 million IEE
- Port & harbour development ... for ships > 500 gross tons EIA for ships < 500 gross tons IEE

2. Telecommunication

 So far no IEE or EIA is required by regulations but EPA may direct the proponent of a project whether or not listed in Schedule I or II, to file an IEE or EIA, for reasons to be recorded in such direction.

3. Information Technology

So far no IEE or EIA is required by regulations

4. Energy sector (Fuel & Power)

•	Hydropower generation > than 50MW EIA < than 50 MW IEE
•	Thermal power generation > 200 MW EIA < 200 MW IEE
•	Power transmission lines < 11 KV & large distribution projects… IEE > 11 KV & Grid Stations EIA
•	Nuclear Power EIA
•	Waste-to-energy generation projects IEE
•	Petroleum refineries EIA
•	Oil and Gas transmission IEE
•	Oil and Gas Extraction IEE

5. Housing, Government Buildings & Town Planning

Housing schemes and urban development projects

	public facilities with significant off-site impacts (e.g. hospital wastes, effluent in water courses) IEE Land use studies, urban plans (large cities) and large-scale tourism development projects with total cost more than Rs.50 million EIA
•	Land use studies and urban plans (large cities)
•	Large-scale tourism development projects with total cost > Rs.50 million EIA
6.	Irrigation, Drainage & Flood Control
	Dams and reservoirs with storage volume < 50 Mcm & surface area < 8 km ² IEE Dams and reservoirs with storage volume > 50 Mcm & surface area > 8 km ² EIA
•	Irrigation and drainage projects serving < 15,000 hectares IEE
-	Irrigation and drainage projects serving > 15,000 hectares EIA
•	Small-scale irrigation systems with total cost < Rs.50 milIEE
•	Small-scale irrigation systems with total cost > Rs.50 milEIA

List II: Production Sector

1. Agriculture Production

•	Poultry, livestock, stud and fish farms with total cost >10 million IEE
•	Projects involving repacking, formulation or warehousing of agricultural products
2.	Agriculture Extension
•	Pesticide manufacturing and formulationEIA
3.	Industries, Commerce and Minerals
•	Industrial States including export processing zonesEIA
•	Cement, fertilizer, chemical and petrochemical plants EIA
•	Ceramics and glass units with total cost > Rs. 50 million IEE
•	Food processing: sugar mills, beverages, milk and dairy products, man-made fibbers and resin products with total cost < Rs.100 million IEE Food processing: sugar mills, beverages, milk and dairy products, man-made fibbers and resin products with total cost > Rs.100 million EIA
•	Manufacturing of apparel, including dying and printing; and wood products with total cost > Rs.25 million IEE
•	Commercial extraction of sand, gravel, limestone, clay Sulphur and other minerals with total cost < Rs. 100 M IEE
•	Crushing, grinding and separation processes IEE
•	Smelting plants with total cost < Rs. 50 millionIEE
•	Smelting plants with total cost > Rs. 50 millionEIA
•	Mining and processing of coal, gold, copper,
	sulphur and precious stones; major non-ferrous metals, iron and steel rolling EIA
•	Synthetic resins, plastics and man-made fibbers, paper, paperboard, pulping, plastic products, textiles, printing And publishing, paints and dyes, oils and fats and Vegetable ghee projects, with total cost > Rs.10 MEIA

List III: Social Sector

1. Education, Training and Manpower

 Regulations 3 and 4 of Pak-EPA (Review of IEE/EIA) Regulations, 2000 do not specify any thing but under regulation 5, EPA may direct to for IEE or EIA for a reason to be recorded.

2. Health, Nutrition, Family Planning & Social Welfare

- Incineration of hospital toxic waste EIA
- Waste disposal facility for domestic or industrial waste, with annual capacity > 10,000 cubic meter (m³) EIA

3. Science & Technology

 Regulations 3 and 4 of Pak-EPA (Review of IEE/EIA) Regulations, 2000 do not specify any thing but under regulation 5, EPA may direct to for IEE or EIA for a reason to be recorded.

4. Water Supply & Sewerage

•	Water supply schemes and treatment planst with	
	total cost < Rs. 25 million	IEE
•	Water supply schemes and treatment planst with	
	total cost > Rs. 25 million	EIA

5. Culture, Sports, Tourism & Youth

Tourism projects with total cost > Rs. 50 millionEIA

6. Mass Media

 Regulations 3 and 4 of Pak-EPA (Review of IEE/EIA) Regulations, 2000 do not specify any thing but under regulation 5, EPA may direct to for IEE or EIA for a reason to be recorded.

7. Governance

 Regulations 3 and 4 of Pak-EPA (Review of IEE/EIA) Regulations, 2000 do not specify any thing but under regulation 5, EPA may direct to for IEE or EIA for a reason to be recorded.

8. Research

Land use studies and urban plans of large cities
 EIA

Appendix-I

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

Revised 2005

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. <u>Name of the Project</u> 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) <u>Plan provision</u>
 - 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	Amount already	Amount proposed for	Balance
provision	committed	this project	available

- (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 verses 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.

<u>Power</u>

- 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.
- <u>For transmission and distribution system</u>: 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.
- <u>For sub-stations and switching stations:</u> 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 extention 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
Α.				
В.				
С.				

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

	(Million Rs)													
	ltem		Year-I			Year-II			Year-III			Total		
		Tota	Loca	FE	Tota	Loca	FE	Tota	Loca	FE	Tota	Loca	FE	
		1	-	С	Ι	Ι	С	Ι	-	С	1	_	С	
А														
В														
•														
_														
С														
•														
	Tota													

Year-wise/component-wise financial phasing

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)

<u>Financial analysis</u>

- 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. <u>Implementation Schedule</u>

- 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. <u>Management Structure and Manpower Requirements</u>

- 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. <u>Certificate</u>

- 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.

Appendix-II

Revised 2005

PC-1 FORM

GOVERNMENT OF PAKISTAN PLANNING COMMISSION

PROFORMA FOR DEVELOPMENT PROJECTS

(PRODUCTION SECTORS)

- Agriculture Production
- Agriculture Extension
- Industries, Commerce and Minerals

Revised 2005

GOVERNMENT OF PAKISTAN PLANNING COMMISSION

PC-1 FORM (PRODUCTION SECTORS)

- 1. Name of the project
- 2. Location
- 3. Authorities responsible for:
 - v. Sponsoring
 - vi. Execution
 - vii. Operation and maintenance
 - viii. 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 production 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 (Production Sector)

2. <u>Name of the Project</u> Indicate name of the project.

2. Location

- Provide name of district and province.
- Attach a map of the area, clearly indicating the projects location.

4. Authorities responsible for

- a. Indicate name of the agency responsible for sponsoring, execution, operation and maintenance
- b. In case of more than one agency, give their component-wise responsibility. For provincial projects, name of the concerned federal ministry be provided.

4. (a) <u>Plan provision</u>

- 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	Amount already	Amount	Balance
provision	committed	proposed for this	available
		project	

(c) Provision in the current year PSDP/ADP.

5. <u>Project objectives</u>

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

6. Description and Justification of Project

 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 in quantitative terms. Also discuss the technology 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.

Agriculture Production

- For fisheries projects: Give area for fishing and the legal rights to that area; the availability of trawlers; amount and type of fish likely to be available.
- For <u>forestry projects</u>: Indicate nature and state of existing forests their growth rate and any problems connected therewith. Give details of species; rotation and anticipated rotation and volume yield. Indicate availability of complementary services, e.g., access roads, saw mills etc.
- For <u>livestock projects</u>: Give the livestock situation of the country and mention any problems connected therewith. Present and future herd size, their species age characteristics and production capacity.
- For <u>agriculture production projects</u>: Give present and future crop yield, cropping intensity; land use pattern technological intervention and the basis for calculation of the future output.
- For all agriculture production sector projects, provide:
 - i. transport, equipment & field machinery available with the department
 - ii. effect on farm income and basis for pricing of outputs
 - iii. farm gate and international prices.

Agriculture extension

- Provide history of extension work in and around project area and justify the extension work.
- Provide transport, equipment and field machinery etc available with the department.

Industry, Commerce and Minerals

- Provide installed capacity, proposed expansion and available technologies, the selected technology and reason for its selection.
- Whether the output is meant for
 - (i) import substitution
 - (ii) meeting domestic demand or
 - (iii) export oriented.
- In case of exports, give likely markets and their size, competitive prices and cost of production to justify the project.

- Provide all information under with and without project conditions in case of BMR & expansion projects.
- 7. <u>Capital cost estimates</u>
 - Indicate date of estimation of project cost estimates.
 - 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	

Quantities

Items	Unit	Year I	Year II	Year III
А				
В				
С				

• 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)

										1.0.)	
lte		Ye	ar-I		Year-II			Year-III			Total	
	Tot	Loc	FE	Tot	Loc	FE	Tot	Loc	FE	Tot	Loc	FE
1115	al	al	С	al	al	С	al	al	С	al	al	С
А												
В												
С												
Total												

In case of revised projects, provide

- Project approved history alongwith PSDP allocations, 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 for 5 years.
- 9. Demand and supply analysis(for Industrial and Agricultural Production Projects)

- Description of product/services.
- Demand/Supply alongwith unit price for the last five years
- Imports/Exports for the last five years alongwith unit price (if applicable)
- Projected demand/supply for 10 years.
- Proposed year-wise production and unit price of the product.
- Existing and proposed arrangements for marketing.

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 (indicate partner agency)
- NGO's/Beneficiaries
- Others
- b) <u>Debt</u>

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 alongwith source
- 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(with assumptions)

Financial analysis

- Quantifiable output of the project
- Profit and loss account and cash flow statement

- Net present value (NPV) and benefit cost ratio (BCR)
- 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)
- Foreign exchange rate of the project (Bruno's Ratio) for import substitute and export oriented projects

Employment analysis

• Employment generation (direct and indirect)

Sensitivity analysis

- Impact of delays on project cost and viability
- 12. <u>Implementation Schedule</u>
 - Indicate starting and completion date of the project
 - Item-wise/year-wise implementation schedule in line chart co-related with the phasing of physical activities.

13. Management structure and manpower requirements

- Administrative arrangements for implementation of project
- The manpower requirements by skills/profession during execution and operation of the Project.
- The job description, qualification, experience, age and salary of each job may 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 instructions issued by the Planning Commission for the preparation of PC-I for Production Sector projects.

• The PC-I alongwith certificate must be signed by the Principal Accounting Officer to ensure its ownership.

Appendix-III

Revised 2005

PC-1 FORM

GOVERNMENT OF PAKISTAN PLANNING COMMISSION

PROFORMA FOR DEVELOPMENT PROJECTS

(SOCIAL SECTORS)

- Education, Training and Manpower
- Health, Nutrition, Family Planning & Social Welfare
- Science & Technology
- Water Supply & Sewerage
- Culture, Sports, Tourism & Youth
- Mass Media
- Governance
- Research

Revised 2005

GOVERNMENT OF PAKISTAN PLANNING COMMISSION

PC-1 FORM (SOCIAL SECTORS)

- 1. Name of the Project
- 2. Location
- 3. Authority responsible for:
 - ix. Sponsoring
 - x. Execution
 - xi. Operation and maintenance
 - xii. Concerned federal ministry
- 4. Plan Provision
- 5. Project objectives and its relationship with Sectoral objectives
- 6. Description, justification and technical parameters
- 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. Social benefits with indicators
 - iii. Employment generation (direct and indirect)
 - iv. Environmental impact
 - v. Impact of delays on project cost and viability
- 12. Implementation schedule
- 13. Management structure and manpower requirements including Specialized skills during execution 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 Social Sector projects.

Prepared by

Name, Designation & Phone#

Checked by

Name, Designation & Phone#

Approved by

Name, Designation & Phone#

Revised 2005

GOVERNMENT OF PAKISTAN PLANNING COMMISSION Instructions to Fill-in PC-I Proforma (Social Sectors)

- 3. <u>Name of the Project</u> Indicate name of the project.
- 2. Location
 - Provide name of District/Province.
 - Attach a map of the area, clearly indicating the project location.

5. 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) <u>Plan provision</u>
 - 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	Amount already	Amount proposed for	Balance
provision	committed	this project	available

- (d) Provision in the current year PSDP/ADP
- 5. <u>Project objectives</u>
 - 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. <u>Description and justification of project</u>
 - Describe the project and indicate existing facilities in the area and justify the establishment of the Project.
 - Provide technical parameters and discuss technology 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

Education, training and manpower

- Give student-teacher ratio for the project and the national average for the proposed level of education.
- Year-wise proposed enrolment of the institution for 5 years.
- For scholarship projects, indicate number of scholarships to be awarded each year alongwith selection criteria.
- Provide faculty strength in relevant discipline, in case of expansion of facilities.
- Indicate the extent of library and laboratory facilities available in case of secondary, college and university education.
- Provide details of technical staff required for operation & maintenance of laboratories.

Health, nutrition, family planning and social welfare

- a) <u>Health projects</u>
 - Indicate whether the proposed facilities are preventive or curative.
 - Bifurcate the facilities between indoor, out door and department-wise.

b) <u>Nutrition</u>

- Indicate the infrastructure and mechanism required for the project.
- Measures taken for involvement and participation of the community.
- Net improvement in the nutritional status of target groups in quantitative terms.

c) Family planning

- Provide information relating to motivation and distribution sub-system.
- Give benchmark data and targets relating to number of couples to be approached and number of contraceptives and other devices to be distributed.
- Mode/mechanism of advocacy and awareness

Water supply & sewerage

- Present and projected population and water availability/ demand.
- Indicate source and water availability (mgd) during next 5,10,20 years.
- For waste water/sewerage, provide present and future disposal requirements, gaps if any and proposed treatment methods and capacity.

- Indicate present and proposed per capita water supply in the project area, comparison be made with water supply in similar localities.
- Indicate whether the proposed project is a part of the master plan. If so, provide details.

Culture, sports, tourism & youth

- Existing and projected flow of tourists in the country/project area.
- Capacity of existing departments to maintain archaeological sites/museums.
- Relationship of archaeological projects with internal and foreign tourism.

Mass media

• Indicate area and population to be covered with proposed project.

Research

- Indicate benefits of the research to the economy.
- Mention number of studies/papers to be produced.
- Indicate whether these studies would result in commercial application of the process developed (if applicable).

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 estimates of Physical activities by main components as per following:

Component-wise, year-wise physical activities										
Items	Unit	Year-I	Year-II	Year-III						
Α.										
B.										
C.										

• Phasing of Capital cost be worked out on the basis of each item of work as stated above and provide information 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
А													
В													

С							
	Total						

In case of revised Projects, Provide

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

8. Annual operating cost

Item-wise annual operating cost for 5 years and sources of financing

9. Demand supply analysis (excluding science & technology, research,

governance & culture, sports

<u>& tourism sectors</u>

- Existing capacity of services and its supply
- Projected demand for ten years
- Capacity of projects being implemented both in the public & private sector
- Supply demand gap
- Designed capacity & output of the proposed project

10. Financial plan

Sources of financing

(a) <u>Equity:</u>

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 (indicate partner agency)
- NGO's/beneficiaries
- Others
- b) <u>Debt</u>

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. (a) Project benefits and analysis
 - Financial: Income to the project along with assumptions.
 - Social: Quantify benefit to the target group
 - Environmental: Environmental impact assessment negative/positive.
 - (b) <u>Project analysis</u>
 - Quantifiable output of the project
 - Unit cost analysis
 - Employment generation (direct and indirect)
 - Impact of delays on project cost and viability

12. <u>Implementation of the project</u>

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

13. <u>Management structure and manpower requirements</u>

- Administrative arrangements for implementation of the project.
- Manpower requirements during execution and operation of the project be provided by skills/profession.
- Job description, qualification, experience, age and salary of each job be provided.
- 14. Additional projects/decisions required
 - Indicate additional projects/decisions required to optimize the investment being undertaken on the project.
- 15. <u>Certificate</u>
 - 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 instructions for the preparation of PC-I for social sector projects.
 - The PC-I along with certificate must be signed by the Principal Accounting Officer to ensure its ownership.