

GOVERNMENT OF PAKISTAN



**INSTRUCTIONS FOR
TECHNO-ECONOMIC FEASIBILITY STUDIES**

**PLANNING COMMISSION
MINISTRY OF PLANNING, DEVELOPMENT & SPECIAL INITIATIVES
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MESSAGE



SECRETARY, PLANNING, DEVELOPMENT & SPECIAL INITIATIVES

It is my privilege to write that Planning Commission/M/o PD&SI has recently prepared “Instructions for Techno-Economic Feasibility Studies” after intensive consultation with stakeholders. This document will serve as standard instructions to carry out feasibility study of all development projects whether in-house or by third party consultant/firm for projects. It includes requirements, types, methodology, procedures, steps, checklist, standards & templates and provides theoretical and practical ground rules for conducting feasibility studies. These are in-line with the Public Finance Management Act 2019. The feasibility studies carried out in accordance with these instructions, will be helpful to optimally allocate and efficiently utilize scarce resources to achieve desired outcome to contribute towards economic growth.

I would like to appreciate the devotion and dedication and hard work of Mr. Shahid Zia Cheema, Chief, Growth & Employment Section, Planning Commission and his team who put their earnest hard work in the preparation of this document.

(Syed Zafar Ali Shah)

Islamabad 1st November 2022

FOREWARD



One of the key objectives of economics is allocation of scarce resources against competing demands and its optimal utilization. The efficient management of resources requires reduced constraints and adopting best possible option to achieve the required project objectives and performance indicators. Long term sustainable growth required optimal utilization of funds to enhance productivity and minimize risk. Public sector investment supplement private sector investment, therefore, effective and efficient utilization of scarce public resources is very essential. The feasibility studies can contribute to minimize risk of cost over run during implementation of the project. Instructions to carry out Techno-Economic Feasibility Studies has been framed and approved by ECNEC to achieve desire objectives. It will help to increase efficiency & cost effectiveness of scarce resources, enhance productivity, thereby, achieving sustainable long-term economic growth. Furthermore, it will support evidence-based decision making for investment in the public sector versus private sector and Public-Private-Partnership mode. It is mandatory to carry out feasibility study prior to initiating project, whether in-house or by outsourcing to third party/consultant.

These Instructions include the methods and standards for conducting feasibility studies. It will identify, appraise and suggest theoretical and practical grounds for informed investment decisions. Effort has been made to provide instructions involved for conducting techno-economic feasibility study to seek cost effective viable alternates, appraise market analysis & risk associated with the project. It will facilitate reduced chances of cost overrun and delay in implementation of the project. It will also direct whether project will be taken up by private sector, finance under PPP mode by proving VGF or included in the PSDP/ADPs.

I am thankful to Mr. Muhammad Jahanzeb Khan, Former Deputy Chairman, Planning Commission for entrusting the assignment to the undersigned and Mr. Zafar Ali Shah, Secretary, PD&SI for his kind patronage to accomplish. Efforts of Growth & Employment Section's Officers & staff, especially, Mr. Zeeshan Inam, Assistant Chief (Growth & Employment) who put his devotion and dedication to finalize this document are appreciated. Positive input/feedback to improve the document would be appreciated.

(Shahid Zia Cheema)
Chief (Growth & Employment)

SECTION-1: GENERAL INSTRUCTIONS

1.1. INTRODUCTION

The need and importance of feasibility studies in development planning is well recognized. It is an analysis that takes project's relevant key factors into account, including but not limited to, economic, financial, technical, legal, social, climatic, environmental and implementing considerations to ascertain the likelihood of completing the project, successfully. It must arrive at clear conclusion /recommendations for investment after considering all basic aspects. It helps to develop a project with clear objectives and its viability in line with vision, and goals of the organization. It is conducted in order to determine the viability & success of the project and assess the risks (including climate risks) related to it. It also identifies different cost-effective options of the proposed project for the same objective, targets, area and population while the climate risks studies aim at identifying optimal and cost-effective climate mitigation and adaptation measures to minimize project's climate implications. Keeping in view resources constraints, feasibility study should have been carried out for each and every project for optimal utilization of scarce resources.

1.2. NEED AND REQUIREMENT

A feasibility study is a pre-requisite to design and carry out all development project on sound lines. It cannot be ruled out for minor ones. The feasibility study will normally lead to and provide input for preparation of project proposal i.e. PC-1. At times, the TOR of the consultant for a feasibility study require the consultants to also prepare the PC-1. In other situations, an executing agency may decide to prepare a PC-1, in-house, using some earlier draft PC-Is/feasibilities prepared by a consultant. A feasibility study should answer atleast following key questions:

1. Does the proposed investment feasible for the stated objective(s)?
2. Does the feasibility study provide all the necessary data and information to prepare PC-I?
3. What are the options to carry out the project and which one is the preferred option?
4. Does the project pose medium to high climate risks and i) requires some adjustments in project design to go ahead or ii) requires the project to be reconsidered overall?
5. Which mode of financing is recommended, i.e. Private, Public-private-Partnership of Public investment?

1.2.1. Purpose

Key purpose while conducting Feasibility Study is to carry out atleast the following analysis/assessment:

- a. **Need Analysis:** Establishing socio-economic and commercial demand for infrastructure/ service that the proposed project is supposed to be addressing;
- b. **Stakeholder Analysis:** Project's fit with the national/ sectoral plans; identification of and consultation with various stakeholders and their needs associated with the project

- c. **Technical Option Analysis:** Studying various technical options to address the need, including but not limited to studying advantages, suitability and limitations (all types of technical, legal, financial and environmental/ social considerations) attached with each of the technical option, and recommending the most feasible technical option and scope of work for the project
 - i. Technical requirements of individual technical options evaluated for successful delivery of the project.
 - ii. Recommendation basis for proposed technical option in terms of its technical sustainability over term of the contract, if part of some infrastructure network, its integration with existing system and life-cycle costs.
- d. **With and without project analysis:** What it would be if the proposed project is not conceived, implemented or implemented as per required KPIs
- e. **Procurement Option Analysis:** How the recommended technical solution should be procured (PSDP vs. PPP)
- f. **Financial Option Analysis:** How the recommend procurement solution should be financed (for instance, when it is PPP, how to finance it considering various PPP modalities). Climate Funding Assessment. This section will help determine the ultimate transaction structure for the project
- g. **Fiscal Impact of the Project:** Fiscal support requirements for the project, its form and estimated amount, availability assessment and payment mechanism.
- h. **Socio-Economic, Climate and Risk Analysis:** Political, Economic, Sociological, Technological, Legal and Environmental (PESTAL) factors to be addressed. This will also be covered simultaneously in (c), (d) and (e) above. This will also help determine ultimate transaction structure for the project for PPP projects.

1.3 FUNDING AND SCOPE

It can be funded from current budget or from development budget through a PC-II for project costing more than Rs. 500 million with the approval of appropriate forum. Feasibility study can also be funded out of dedicated fund such as project development facility maintained by P3A. Ministries/Corporations should get approval of the Project Development Facility as a separate project in the PSDP for conducting feasibility of their projects. All Provinces should have Project Development Facility Fund for conducting feasibility of the Provincial Projects.

These are instructions for conducting feasibility studies. The General Instructions include the methods and standards for conducting feasibility studies. The feasibility study will identify, appraise and suggest theoretical and practical grounds for investment decisions. The feasibility studies should be carried out for different categories of projects like roads, rails, ports, culture and tourism, schools, universities, hospitals, water resources, climate resilience and mitigation etc. as per threshold given in this document. The provision of these Instructions applies to all Federal government's division, agencies, autonomous bodies, attached departments, corporations, regulatory bodies and other federal organizations. Provincial Government and regions (AJK, GB) should also follow this till they frame their own procedures, processes and templates etc.

The CDWP in its meeting held on 21st February, 2021 decided feasibilities should be carried out for all major cities for ring roads, waste water treatment, mass transit proposal, master plans. Stock of feasibility studies be available for selection of projects for investment.

1.4. MODES OF FEASIBILITY STUDIES

1.4.1. Inhouse

It should be mandatory to carry out feasibility study of all development projects. It is to be carried out inhouse, but professionally for the projects costing less than Rs. 500.00 million and will be considered/discussed in Pre-CDWP meeting. The Sector specific parameters and standards should be adopted to carry out feasibility studies including climate assessments (Climate Adaptation and Resilience Assessment (CARA) and Climate Mitigation Assessment (CMA) and at least three options for each project should be given with respective pros and cons. The preferred option would be recommended, with due justifications on the basis of solid grounds, to peruse.

1.4.2. Through Independent/Third Party Consultant

A professionally carried out feasibility study must be an essential part of investment proposal. For the projects costing Rs.500 million or more a feasibility study from a professional consultant is required. Where a feasibility cannot be undertaken in-house due to technical complexity of projects costing less than Rs. 500.00 million, the consultants can be engaged but it will be appreciated if it is carried out inhouse, professionally. For the proposed investment, where consultants are to be engaged, best practice requires that terms of reference (TOR), a prerequisite, should be well drafted by incorporating results, assumptions and model used for undertaking the techno-economic and financial analysis in the PC-II including climate assessments i.e. (Climate Adaptation and Resilience Assessment (CARA) and Climate Mitigation Assessment (CMA). The minimum requirement/ threshold should be spell out in TORs for carrying-out FS in each case. This will help establish the baseline requirements for the deliverables of each type.

1.5. TERM OF REFERENCE (TORs)

A feasibility study aims at possibility checks for executing a project and identify the potential risks that can hamper the progress of the project. Further, it is the study carried out at the very first stage of any development project to know if the project idea is viable to proceed or not. Several factors affect the project's success and hence one must conduct such study, first. The scope, nature and objectives of the projects differs from sector to sector and project to project. The TORs of the consultancy to carry out feasibility study is the most important aspects. The TORs must be attached with the PC-I to justify the cost proposed for feasibility. The TORs of each project may be different. However, TORs of the feasibility study must include the following aspects, at least.

- | | |
|--|---|
| 1. Title, ownership with need and justifications | 2. Available funding options |
| 3. Nature and objectives | 4. Scope and timeframe |
| 5. Competing technologies | 6. Possible alternative options |
| 7. Input-output analysis | 8. Institutional capacity analysis |
| 9. Social and environmental impact assessment | 10. Demand-Supply Analysis |
| 11. Legal aspects | 12. outcome/deliverables |
| 13. Economic and financial viability with clear recommendations to go for proposed investment or | 14. Recommendations for private, public or PPP mode |
| 15. Stakeholder Analysis | 16. Climate risk assessments to develop climate mitigation and/or adaptation needs of the project |

1.5.1 Additional areas to be included in the ToRs for PPP Projects:

- a. Organize roadshows, if required, in case of a PPP project;
- b. Preparation of project marketing documents required during various stages of project development e.g., Project information Memorandum (PIM)
- c. Assist in preparation of PQP & PP as required under the P3A Regulations;
- d. Alternative structure in case the institution lacks capacity to prepare, execute or monitor the project;
- e. Value for Money Analysis and Fiscal Commitments and Contingent Liabilities' Analysis in case of PPP projects.
- f. PPP option analysis and recommendation of the most suited option taking into account project's risk profile and appropriate risk allocation
- g. Risk mitigation strategies;
- h. Justify provision of VGF, nature of VGF and estimates thereof;
- i. Disbursement and recoupment mechanisms, if applicable, in case of PPP projects;
- j. Draft/ prepare EOI, RFP, concession agreement (including the subsidiary agreements) as per the applicable laws/ regulations;
- k. Make sure that approved transaction structure and subsequently the successful bidders offer is completely mapped into the concession agreement;
- l. Assist IA at various stages of procurement till financial close.

1.6. EXPECTED OUTCOME OF FEASIBILITY STUDY

Indicate the expected outcome of the survey/feasibility study in quantifiable terms (logical framework). It may also be indicated whether any project will be prepared after the survey and provided possible alternative options to undertake the project & cost-benefit analysis of all options. The best option to peruse will be recommended on the logical grounds/basis. Feasibility studies should be considered in Pre-CDWP in detail. Technical & economic viability and alternative options should be made part of CDWP Working Paper.

1.7. ECONOMIC AND FINANCIAL ANALYSIS

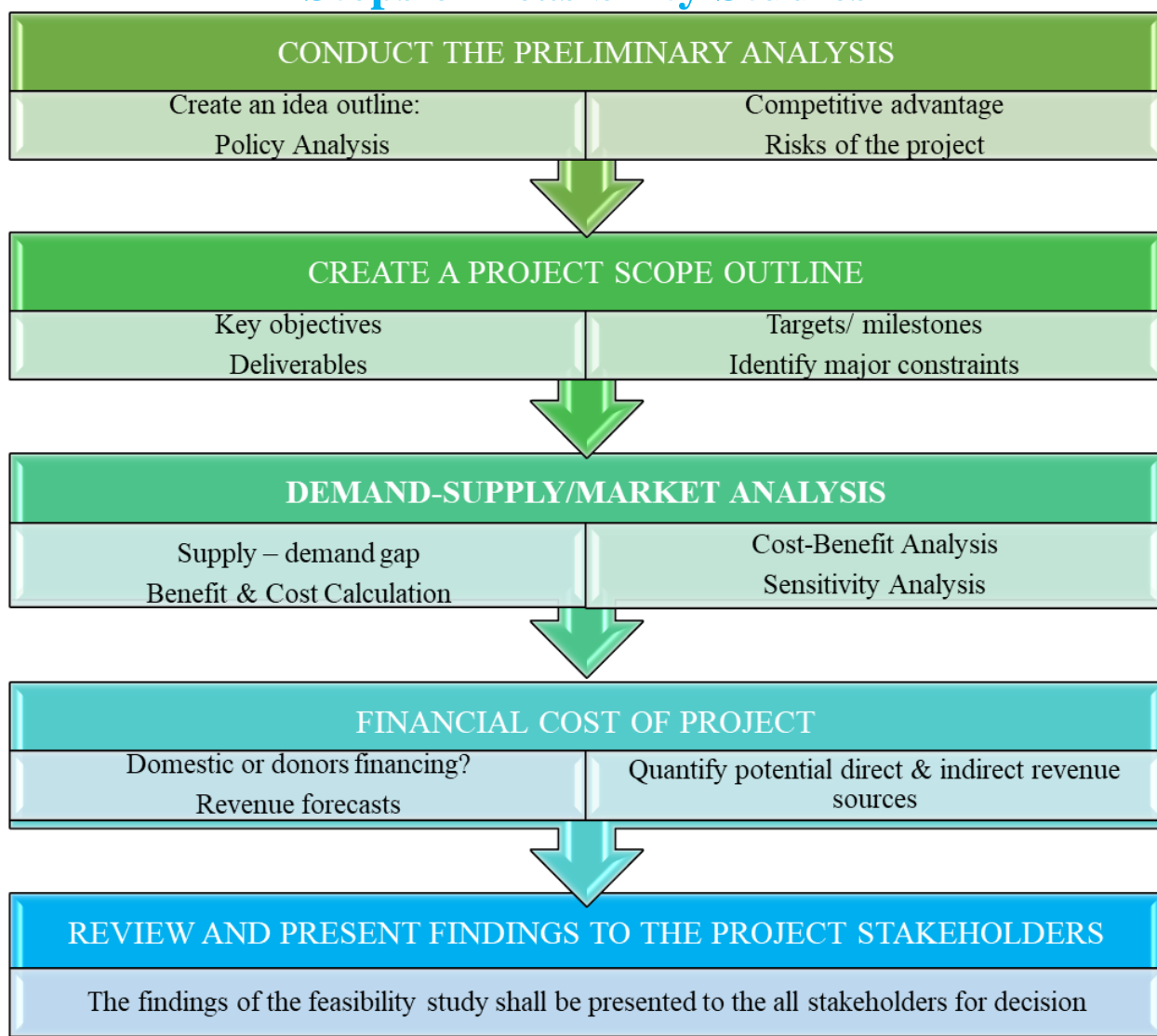
The following will illustrate the difference between financial and economic analysis to ascertain viability with clear recommendations to go for proposed investment

Financial Analysis	Economic Analysis
Financial feasibility estimates actual monetary costs and cash flows from the perspective of individual parties responsible for projects, not the entire society, and accordingly calculates financial profitability to ascertain projects' feasibility.	Economic feasibility measures public projects' costs and benefits from the perspective of the entire nation (society) and accordingly it has to calculate product prices, exchange rates, wages, etc. as shadow prices, in principle.
Transfer payments like taxes and interest should be included in financial feasibility analysis.	Transfer payments like taxes and interest should be excluded from economic feasibility analysis.
Financial feasibility analysis uses the financial discount rate in consideration of market interest rates, project risks, etc.	Economic feasibility analysis uses the social discount rate as a discount rate

SECTION-2: STEPS TO CONDUCT FEASIBILITY STUDY

A feasibility analysis is an in-depth process to determine the factors that will lead a project to success or failure. It is not only a part of initial project design but also conducted to evaluate the strengths and weaknesses of the projects and identify and assess the opportunities and threats present in the natural environment, the resources required for the project, and the prospects for success. The viability of project in the respective sectors depends the respective sector's parameters, standards and alternate options. The following five steps shall be taken into consideration while conducting feasibility study. Value for Money Analysis (VFM) will be undertaking for projects on PPP basis by conducting analysis of optimal PPP option vis-à-vis Public Sector Comparator along with assumptions and reasons thereof.

Steps of Feasibility Studies



2.1. CONDUCT THE PRELIMINARY ANALYSIS

There are four key steps to performing a preliminary assessment:

- i. Create an idea outline: Background, engineering data, demography, geography, economy, case study of similar types of project in the area, identify issues, conduct literature review, climate data.
- ii. Policy Analysis: Whether, align with Policy and Plans, environmental impact, source of Financing (also opportunities for climate finance in the country). National climate actions (NDCs, NAP) in relation to project
- iii. Examine your competitive advantage: What will do differently to ensure that idea will succeed, such as talent, location, technology, climate benefits etc.
- iv. Determine the risks of the project: Risk management is a huge part of assessing the viability of any project. Perform a risk assessment to outline anything that may pose a threat to success.

2.2. CREATE A PROJECT SCOPE OUTLINE

This outline will detail the objectives of the project by using the eight key steps in mind while designing project scope outlines.

- i. Why project is initiated?
- ii. What are the deliverables?
- iii. Key objectives of the Project (sectoral, economic, social and climate (including environment))
- iv. Project statement of purpose
- v. Statement of climate justification of the project
- vi. Targets/ milestones of the projects
- vii. Is this plan feasible within a reasonable period of time?
- viii. Is this plan economically feasible?
- ix. Is the project climate friendly?
- x. Identify major constraints
- xi. Project impacts 1) sectoral/institutional, 2) economic, 3) social, 4) climate (including environment) and 5) gender mainstreaming

2.2.1 PPP Projects:

Following may be added for PPP projects

- a. Detailed financial model with assumptions, justification for assumptions/ market benchmarking and guidance regarding the linkages among various variables, calculations, sheets etc.
- b. Determining the cost of equity and discount rate for the private party and Government respectively;
- c. Tentative termination payments/ compensation;
- d. Equity IRR, Equity NPV and debt related ratios;

- e. Economic cashflows of the project including but not limited to estimating economic benefits emanating from cost savings, time savings, carbon credits etc.;
- f. VFM, achieved or not?

2.3. DEMAND-SUPPLY/MARKET ANALYSIS

The five key benefits of Demand-Supply are:

- i. Existing capacity of services and its supply/demand
- ii. Projected demand for 10 years.
- iii. Capacity of the projects being implemented in public/private sector.
- iv. Supply – demand gap.
- v. Climate change impacts on Supply – demand
- vi. Designed capacity and output of the proposed project.
- vii. Identification of other market opportunities for your project through focus groups, surveys, and potential client interviews.
- viii. Insight into your competition including their products, services, marketing choices, client base, etc.
- ix. Proposed year-wise production and unit price of the product.
- x. Existing and proposed arrangements for marketing.
- xi. Information on the market for your project including the size and needs.
- xii. Propose alternative/additional management structure in case Implementing Agency lacks capacity to implement and monitor project.

2.4. FINANCIAL COST OF THE PROJECT

Financial feasibility analysis needs to be conducted to ascertain an appropriate amount of government financial support. There are a few major considerations that should keep in mind when making these financial analyses:

- i. Identify the channel whether resources come from domestic source or from donors financing?
- ii. Identify and quantify potential direct & indirect revenue sources and revenue drivers pertaining to each revenue source, and make adequate revenue forecasts over the life of the Project;
- iii. Identify climate finance sources;
- iv. What is the break-even point for profit once project is off the ground, if applicable?
- v. Which risks will impose an undue financial burden on project budget?
- vi. How much will you need to complete this project, including risks?
- vii. What is the adaptation, mitigation and/or co-benefit costs associated with the project?

2.5. REVIEW AND PRESENT FINDINGS TO THE PROJECT STAKEHOLDERS

The findings of the feasibility study shall be presented to the all stakeholders for decision whether the proposed project shall be carried out or not.

Sample of Preliminary Feasibility Study

Classification	Option 1	Option 2	Option 3
Background/Main content	Goals/objective 1. ----- 2. ----	Goals/objective 1. ----- 2. ----	Goals/objective 1. ----- 2. ----
Project Description	Brief description The project -----	Brief description The project -----	Brief description The project ----- -----
Project Cost	Rs. 600 million	Rs. 600 million	Rs. 600 million
B/C Ration	0.75:1.0	1.1:1.0	1.5:1.0
NPV	Rs. -100 million	Rs. 150 million	Rs. 250 million
IRR*	10%	15%	18%
Viability of Project	Not Feasible	Feasible	Feasible
Climate Risks	Medium to High (adjustments not feasible)	Medium to High (adjustments are feasible)	Low
Decision	Reject	Acceptable	Recommended

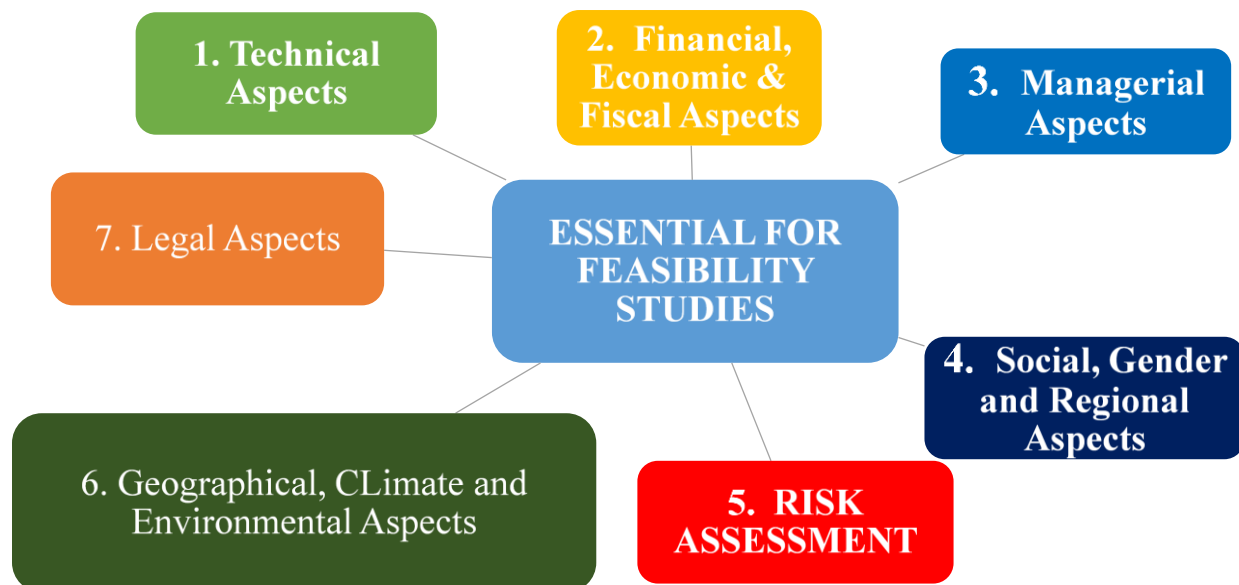
*Projects with IRR more than 12% would be considered feasible.

It should include detailed analysis of Fiscal Commitments and Contingent Liabilities (FCCL) of the project, identify sources and estimates of GoP liabilities in case such liabilities are triggered and risk mitigation strategies, for PPP projects.

SECTION-3: ASPECTS OF FEASIBILITY STUDIES

The government has scarce resources to finance its Public Sector Development Programme (PSDP). Keeping in view resource constraints, government is willing to achieve maximum efficiency, effectiveness and optimal utilization of funds to ensure planned project outputs and outcomes. For this purpose, feasibility studies played a pivotal role to determine the viability of any project before its initiation. The feasibility study covers technical, financial, economic, regional, climatic, environmental, legal etc. aspects whether the proposed project is viable/feasible or not. Templates for techno-economic feasibility study are at Annex- I. Feasibility study will be conducted in-house or by third party, the feasibility study should cover but not limited to the following aspects for viability of the project.

Figure 3.1: Key Aspects of Feasibility Study



3.1. TECHNICAL ASPECTS

This aspect of the feasibility study would seek to establish if the proposed investment is technically feasible or not. This would set out the current status in the area of the proposed investment and the output that would be delivered by the investment e.g. some infrastructure such as a road, bridge, canal etc. The technical feasibility needs to demonstrate that technically the proposed investment is sound – to trivialize but make a point that we are not trying to defy the laws of nature with this proposed investment. For example, if the proposed investment is a dam – the technical feasibility will establish that there are sufficient flows in the stream to be dammed to

justify construction of the dam, or that the proposed spillway is sufficient but not excessive to ensure safety of lives and livelihoods.

The technical feasibility should elaborate the scale, size, scope of the proposed investment. This becomes a key input in trying to estimate the costs of inputs and outputs of the investment and necessary for the economic and financial investment. The technical feasibility should make a case for the proposed investment e.g. why is a particular technology being selected relative to another? How/why has this particular location been chosen, or this particular route been selected?

Section 6 of the PC-1 proforma.

- i) Description and Justification of Project (enclose feasibility study for projects costing Rs.500 million & above.)
- ii) Describe the project and indicate existing facilities in the area and justify the establishment of the Project.
- iii) Provide technical parameters i.e. input and output of the project. Also discuss technological aspect of the project.
- iv) Provide details of civil works, equipment, machinery and other physical facilities required for the project.
- v) Indicate governance issues of the sector relevant to the project and strategy to resolve them.
- vi) Determine the life-cycle costs (including capital, operating and major maintenance costs)
- vii) Establish social and commercial demand for the Project's existing and potential offerings, products and services;

3.2. FINANCIAL & ECONOMIC ASPECTS

This aspect of a feasibility determines if the proposed investment is financially and economically viable. The Manual for Development Projects (2021) elaborates in considerable detail economic and financial analysis and those preparing feasibility studies are advised to follow the guidance provided in this reference. The financial and economic analysis is critical information for the Planning Commission to take a decision on whether to make an investment or not. The quality of the financial and economic analysis is often poor that this aspect of a feasibility (and PC-1) is unfortunately often set aside. The feasibility study should include all the information necessary to complete Section 11i) and 11ii) of the PC-1 proforma.

Section 11 of the PC-1 proforma.

11. Project benefits and analysis

- a. Financial Income to the Project along with assumptions
- b. Financial and Economic Analysis (with assumptions)
 - i. Financial analysis
 - a. Quantifiable output of the project
 - b. Profit and loss account and Cash Flow statement

- c. Net present value (NPV) and Benefit Cost Ratio
 - d. Internal financial rate of return (IFRR)
 - e. Unit cost analysis
 - f. Breakeven Point (BEP)
 - g. Payback period
 - h. Return on equity (ROE)
- ii. Economic analysis
 - a. Provide taxes & duties separately in the capital and operating cost
 - b. Net present value (NPV) and benefit cost ratio (BCR)
 - c. Internal economic rate of Return (IERR)
 - d. Employment analysis
 - e. Employment generation (direct and indirect)
 - f. Sensitivity analysis
 - g. Impact of delays on project cost and viability
 - iii. Fiscal Analysis for PPP projects
- c. Sensitivity analysis
 - d. Impact of delays on project cost and viability

3.3. MANAGERIAL ASPECTS

The managerial aspects of a feasibility study should consider the labour and institutional capacity to manage the investment and its operation and maintenance upon completion. The feasibility study should provide sufficient information to allow for Section 13 of the PC-1 proforma to be completed which includes

Section 13 of the PC-1 proforma.

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.

3.4. SOCIAL AND REGIONAL ASPECTS

The social and regional aspects of a feasibility study should address (but not necessarily be limited to); employment generation particular for youth and women and other social impacts, consider how the investment addresses regional disparity and inequity, gender parity and an assessment of the environmental impact. which should also include an assessment of the resilience of the investment to climate change. Some investments may require a separate environmental impact assessment

The social and regional aspects of a feasibility study should also examine the political, and legal feasibility of an investment. In particular whether the investment is likely to cause social unrest because some groups or communities may actually be worse off by the investment. Land acquisition and compensation is often a cause of concern and a social aspect of an investment that needs careful consideration. Similarly, investments need to be considered in the context of the political economy – certain investments have considerable political baggage already invested and therefore although technically, economically and perhaps socially feasible are politically infeasible.

Social and regional aspects also need to consider security aspects – securing the site, securing lives, goods, services during construction and post-construction. Security costs can in some proposed investments become quite significant and jeopardize the economic viability of an investment. It is important that realistic rather than an optimistic perspective is adopted with an abundance of caution

3.5. GEOGRAPHICAL, CLIMATE AND ENVIRONMENTAL ASPECTS

The environmental analysis evaluates a project's potential environmental risks and impacts in its area of influence. The environmental analysis considers the natural environment (air, water, and land) and transboundary and global environmental aspects, with a special focus on climate change (both mitigation and adaptation aspects). Besides that, Geographical location of a project is an integer part to determine viability of the project.

Pakistan is among top five countries which could be affect by climate changes. climatic changes are expected to have wide-ranging impacts, such as: reduced agricultural productivity, increased variability of water availability, increased coastal erosion and sea water incursion, and increased frequency of extreme climatic events. It is imperative to carry out in depth assessment of possible outcomes of the project on climate change and possible climate change impacts on the project. The following questions can help to make decision:

1. The project is located in an area that has been previously impacted by climate extreme or a natural hazard such as flood-prone area.
2. The project or its components are sensitive to changes in climatic conditions such as excessive glacial melt.
3. The project is of critical importance to the community it serves.

Section 11 of the PC-1 (2022) proforma.
Climate and Hazard Initial Risk Assessment (CHIRA): Refer to Section II Chapter 4 for CHIRA methodology

3.6. LEGAL ASPECTS

Legal and regulatory one of the key aspects for determining viability of the projects. It is a fact that number of projects cost overrun and delay in implementation of the project activities due to legal issues such as land acquisition. It is imperative while conducting feasibility that all legal and regulatory requirements taking into consideration to avoid revision of the project.

3.7. RISK ASSESSMENT

Risk is an event or a set of events that, should they occur, will have an effect on the project. Risks are classified within the following categories:

Section 11 of the PC-1 proforma.

Political risks – changes in support schemes, taxation rates, international sanctions etc.

Technical risks – efficiency, maintainability, new technologies etc.

Economic risks – Interest rates, credit risk, option price etc.

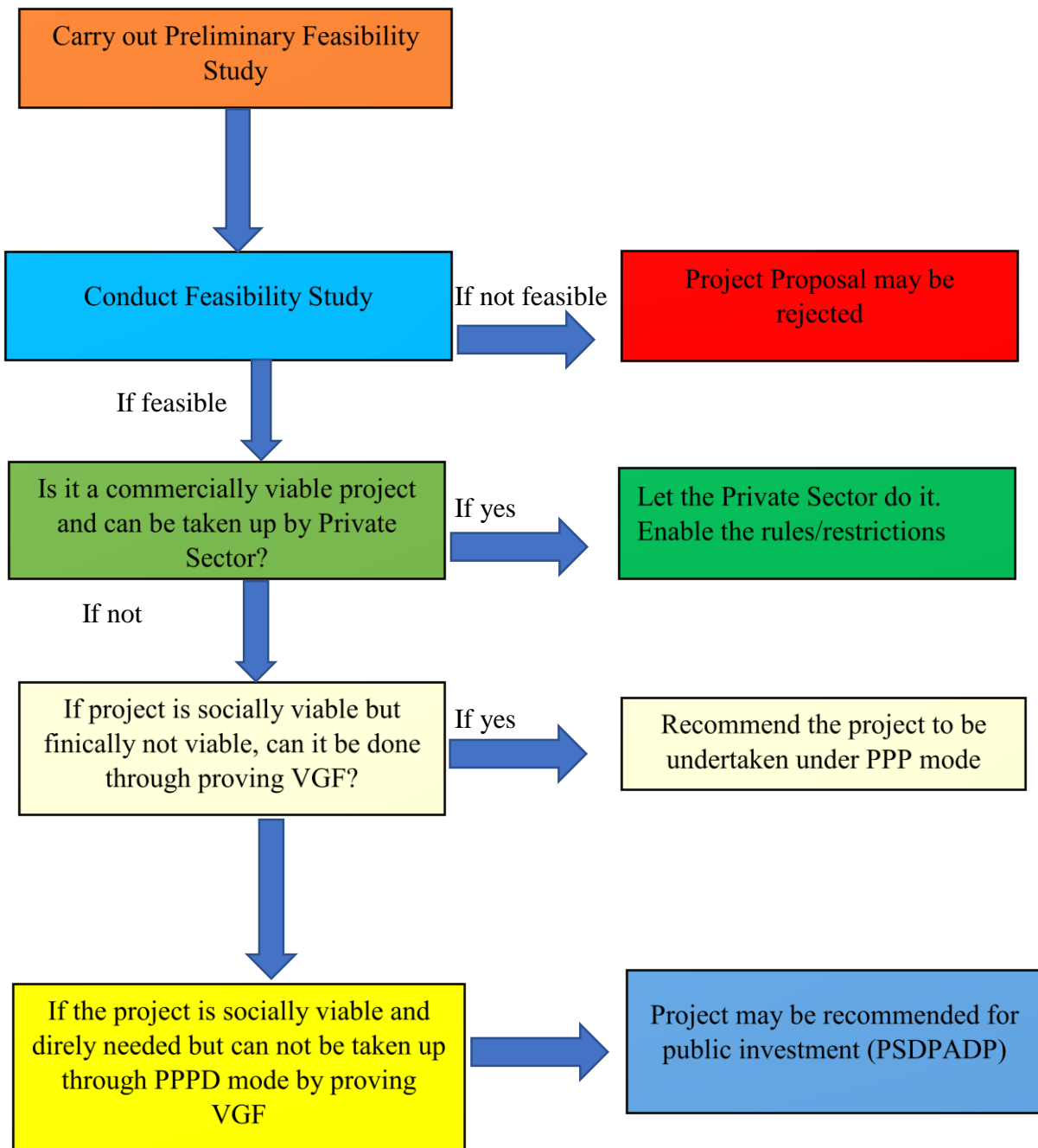
Social risks – safety, labor, environmental etc.

Climate risks – impacts on infrastructure, livelihoods etc.

3.8 PRELIMINARY FEASIBILITY STUDY'S DECISION MODEL

Public Investment is a key instrument to accelerate economic activities and achieve desired development goals/targets set in Annual Plans, Five Year Plan and Long term Vision of the country. However, resource constraint disrupts project activities and impede effective delivery resulting cost overrun and delay in implementation of the projects. Resource management is an important part of project planning. The government objective is to achieve maximum efficiency, effectiveness and optimal utilization of funds. For this purpose, Preliminary feasibility analysis is the first steps to seek viability of the projects for utilizing resources to obtain maximum socioeconomic benefits. It will also recommend whether project would be taken up by private sector, in case, project is socially viable but finically not viable so it can be taken up under PPP mode by proving VGF and If the project is socially viable and direly needed then it should be funded through PSDP. The figure 1 below provided criteria for taking up project either, by Private Sector, PPP mode or PSDP.

FIGURE 3.2:

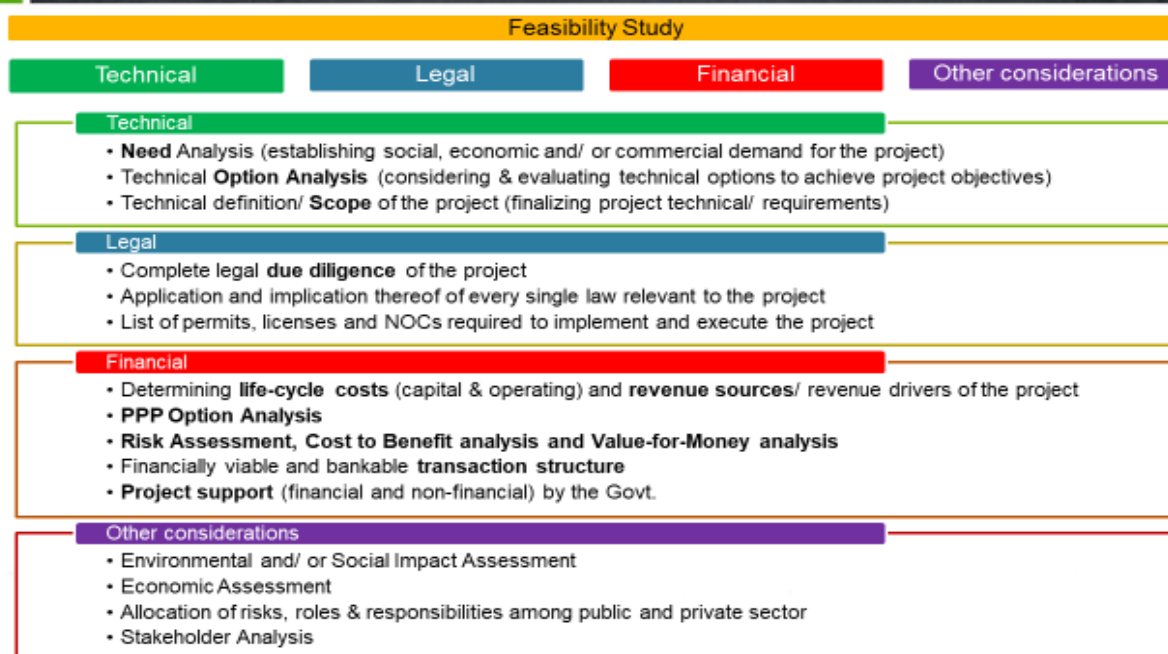


SECTION-4 PROJECTS UNDER PUBLIC PRIVATE PARTNERSHIP

4.1 PPP PROJECTS

The following components should be taking in consideration for the projects funding under PPP Mode.

PPP Project Feasibility Study - Essential Components



4.1.1 Technical

- Identify, study and evaluate Pakistan Post's existing service offerings, operations and assets which are the subject matter of the Project;
- Technical definition of the Project including outlining its scope of works and services, the products and services to be offered; and clearly tabulate the output specifications/ deliverables of the Project;
- A techno-economic analysis explaining the project rationale, fit with national development plans, bankability, economic and financial viability, and project cost and financial model
- Analyses with respect to legal, regulatory, environmental, social and gender impact of the project considering applicable international best practices;
- The management and operation plan for the project, including proposed delivery mode;

- f. Establish social and commercial demand for the Project's existing and potential offerings, products and services;
- g. Identify and comprehensively evaluate existing postal infrastructure (including postal counters, Express Post (EP) centers, post offices, collection and sorting operations ,transmission and delivery offices/ operations) that must be transformed into state of the art technologically driven integrated solution covering first mile-counters-pick up, sorting, warehousing, long and short haulage/ transportation and last mile delivery to provide fast, efficient, visible and competitive delivery services under the Project;
- h. Determine the life-cycle costs (including capital, operating and major maintenance costs) attached to the upgrading/ rehabilitating/ overhauling existing EP centers/ post offices, to be transformed into modern technology- driven postal/ logistics centers (covering pick up, booking, sorting/warehousing, transmission and last mile delivery);
- i. Suggest expansion of the existing product/ service range (especially in the backdrop of growth of ecommerce sector both inland and overseas) and determine corresponding investment to be made in the infrastructure/assets;
- j. Outline human resource requirements and assist Pakistan Post in preparing a comprehensive human resource plan to utilize existing employees of the Pakistan Post in the most optimum fashion;
- k. Compile all the technical parameters of the Project and address them appropriately in the FS, bidding documentation package including RFQ, RFP, draft PPP Contract;
- l. Devise output specifications and service level agreement for the private party;
- m. Assist Pakistan Post in carrying out evaluation of Pre-Qualification documents and Request for Proposal comprising of, *inter-alia*, Technical Proposal & Financial Proposals for selection of the successful bidder;
- n. Assist Pakistan Post in addressing all the technical aspects of the bid proposals while issuing Letter of Intent & Letter of Support for the Project;
- o. Formulate complete set of activities to adequately operate/ manage the Project during the life of concession;
- p. Take into account/address all the technical aspects in the PPP Contract;
- q. Assist Pakistan Post in reviewing the designs submitted by the private party for the physical works to be performed under the Project

4.1.2 Legal

- a. Assist Pakistan Post in seeking all the approvals from the P3A in terms of the P3A Act 2017 (as amended) including preparation of Project Qualification Proposal and Project Proposal;
- b. Attending the meetings for approval of Project Qualification Proposal and Project Proposal, if so, required by Pakistan Post or Public Private Partnership Authority;

- c. Ascertain legal and regulatory requirements attached to the provision of existing/ potential movable and immovable assets of the Pakistan Post, under the purview of the Project, and whether they are free from all encumbrances and can be leveraged to the private sector for up gradation and/ or operated under the PPP contract;
- d. Prepare complete bidding documentation package including PIM; Pre-qualification document/ RFQ, if so required; RFP; draft PPP agreement; and any other agreements subordinate to the PPP agreement and if so, required from the Transaction Advisor to incorporate the comments and observations in the bidding packages;
- e. Ascertain any approvals, consents and authorizations required by Pakistan Post/ private party from any government agencies, under their respective applicable laws, to successfully implement the Project;
- f. Assist Pakistan Post in carrying-out transparent, efficient and competitive bidding process for the Project in accordance with the applicable laws and rules;
- g. Assist Pakistan Post in negotiating PPP contract and other subsidiary/additional agreements to the PPP contract, if any, with the successful bidder;
- h. Formulate a Monitoring and Reporting mechanism to ensure compliance of private party actions as prescribed in the PPP agreement and devise an adequate payment and penalty mechanism. This mechanism should be simple, effective and practical to expedite the achievement of financial close for the Project;
- i. Identification, allocation and mitigation of the Project risks, including the insurance requirements pertaining to the identified risks;
- j. Assist Pakistan Post in negotiating Concession Direct Agreement and other allied agreements with the successful bidder/lenders;
- k. Assist Pakistan Post in reviewing relevant documentation package for the financial close; and
- l. Assist Pakistan Post in fulfilling conditions precedent related to timely achievement of financial close.

4.1.3. Financial

- a. Establish socio-economic and commercial demand of the Project;
- b. Explore climate financing support for the Project;
- c. Identify and quantify potential direct & indirect revenue sources and revenue drivers pertaining to each revenue source, and make adequate revenue forecasts over the life of the Project;
- d. Carryout option analysis, benefit to cost analysis and value for money analysis for implementing the Project through various private sector participation modalities, including but not limited to, the following:
 - i. Rehabilitate/ Build-Operate-Transfer (R/BOT) – with and without

- Viability Gap Funding (VGF) options
 - ii. R/BOT – annuity based
 - iii. Build-Transfer/ Deferred payments
 - iv. Other revenue sharing/ (high and medium) risk-sharing model such as Joint Venture structure, or
 - v. Any other PPP model which is most appropriate for the Project.
- e. A risk review and carry-out risk assessment for various options and suggest adequate risk-sharing and risk-mitigation mechanism keeping in view various PPP modalities;
- f. Assist Pakistan Post in securing approval of the Project from the Risk Management Unit/ Debt Office of the Finance Division GoP;
- g. Detailed information as to any government support which may be required in connection with the project including funding through the viability gap fund or the project development facility;
- h. comprehensive details of the proposed transaction structure with all supporting documents including a complete techno-economic feasibility study, together with all associated and supplementary studies required to conduct an appraisal
- i. Suggest financial transaction structure that is viable and bankable for the private party and offers VFM solution to the government
- j. Carry-out assessment of Fiscal Commitments & Contingent Liabilities (FCCL) for the Project;
- k. Establish viability gap funding (VGF) requirements for the Project along with determining the quantum, nature and type of the VGF;
- l. Prepare robust financial model (addressing base-case and risk-adjusted scenarios for various PPP modalities, including but not limited to R/BOT, Deferred/Annuity Payments, and Hybrid Structures etc.) specifically addressing the following aspects over the entire Project concession period:
 - i. Assumptions, clearly categorized as general, revenues & costs, macro-economic and financial markets,
 - ii. Income statements, statements of cash flows, balance sheets and fixed assets 'schedules,
 - iii. Debt schedules and funding sheets highlighting sources and uses of funds,
 - iv. Valuations showing Project Internal Rate of Return (IRR), Equity IRR, Project Net Present Value (NPV), Equity NPV, Payback Periods (Simple and Discounted),
 - v. Ratio analysis such as Debt Service, Interest Cover, Project Life Cover, Loan Life Cover and other prominent ratios,
 - vi. Sensitivity analysis for critical variables of the Project,

- vii. Financial implications for the public sector accounting for GoP/Pakistan Post revenue share from the Project, corporate taxes etc.,
- viii. Financial results for various P3 modalities identified above, and Benefit to cost and value for money analysis for both the public and the private sector.

A specimen of TORs for PPP transaction advisor is attached at annex-I.

TERMS OF REFERENCE FOR A PPP TRANSACTION ADVISOR

A. Objective of Assignment

Pakistan Post intends to revamp its spectrum of services and operations to enable it to turn itself into a self-sustainable entity capable of operating and emulating the model of other successful public sector owned postal entities elsewhere in the World. As a part of its reforms agenda Pakistan Post has identified the following three initiatives, namely:

- a. Digitalization of Pakistan Post's Financial Services
- b. Upgradation/ revamping/ re-engineering of Pakistan Post's Courier, Logistics, Express and Mail Business (the Project), and
- c. Rebranding of Pakistan Post's products and services

Pakistan Post, owing to acute constraint on its resources, is seeking private sector investment towards upgrading its entire range of infrastructure/ assets relevant to its logistics/ express/ mail business. The ultimate objective of the Assignment is to seek private sector participation which can provide VFM solution to the government while offering bankable financial structure to the private sector. Hiring a qualified Transaction Advisor for the Project will support Pakistan Post in:

- a. Developing a VFM oriented and bankable transaction structure for the government and private sector respectively;
- b. Soliciting a technically qualified and financially sound private investor;
- c. Seeking required approvals from P3A in the light of P3A Act;
- d. Facilitating private sector in achieving smooth financial close for the Project.

B. Project Outline

Although the Transaction Advisor proposed to be hired under the RFP will assist Pakistan Post in determining the exact scope of work and transaction structure for the Project; however, Pakistan Post has envisaged the Project in the manner whereby the private sector will make required investment, from its own resources, towards:

- a. Upgrading, modernizing and/or overhauling infrastructure and allied facilities in its Express Post centers and other post offices across the country;

- b. Existing and new product development through tapping Pakistan’s e-Commerce local and cross-border opportunities;
- c. Modernizing Pakistan Post’s supply-chain including fleet, sorting and delivery assets/mechanisms to bring service delivery at par with the private industry players; and
- d. Training and capacity development of Pakistan Post human resource to cope with the modern day postal challenges

As aforesaid the private sector will make required investment in upgrading/ overhauling the infrastructure and will operate it in partnership with Pakistan Post for a pre-defined period of arrangement tentatively under a revenue sharing arrangement.

C. Scope of Assignment

Pakistan Post intends to hire a qualified Transaction Advisor to assist Pakistan Post in developing, structuring and procuring the Project on PPP basis. The Transaction Advisor will be expected to perform the following tasks (together called as ‘the Assignment’), including:

- a. Carrying-out full-scope Feasibility Study of the Project and devise transaction structure capable of:
 - i. Providing financially viable and bankable structure to the private party, and
 - ii. Offering VFM solution to the public sector
- b. Prepare complete bidding documentation package for the Project, including Request for Proposal (RFP), Request for Qualification (RFQ), PPP Contract/ Concession Agreement, Project Information Memorandum etc;
- c. Assist Pakistan Post in soliciting technically qualified and financially sound private party through carrying-out transparent and efficient international competitive bidding; and
- d. Assist Pakistan Post in facilitating private party in smooth implementation of the Project including achieving its financial close by the private party, transferring assets and resources under the Project etc.

Following table captures the set of tasks to be performed by the Transaction Advisor in a phased manner:

Phase of the Assignment	Time period (weeks)	Tasks	Deliverables/ Outcome
Phase-1: Feasibility Study	12 weeks from the date of signing of the Transaction Advisory Agreement	<p>The Transaction Advisor shall carryout full-scope bankable Feasibility Study for the Project capable of addressing all the legal, technical and financial aspects of the Project.</p> <p>The Transaction shall assist Pakistan Post in devising financially viable and bankable transaction structure for the Project which should help government fetch VFM solution.</p> <p>The Transaction Advisor shall assist Pakistan Post in securing requisite approvals under the P3A Act.</p>	<ul style="list-style-type: none"> • Inception Report • Due Diligence Report • Feasibility Study • Option Analysis • Project Qualification Proposal (in accordance with the P3A Act)
Phase-2: Bidding documentation package	4 weeks from the date of completion of Phase-1	The Transaction Advisor shall prepare entire bidding documentation package for the Project including RFP, RFQ, PPP Contract/ Concession Agreement, Project Information Memorandum	<ul style="list-style-type: none"> • Report on bidding documentation package • Entire bidding documentation package
Phase-3: Procurement	12 weeks from the date of completion of Phase-2	<p>The Transaction Advisor shall assist Pakistan Post in soliciting technically qualified and financially sound private party for the Project through international competitive bidding process.</p> <p>The Transaction Advisor shall also assist Pakistan Post in adequately marketing the Project to generate sufficient investor interest.</p>	<ul style="list-style-type: none"> • Marketing material • Assistance in conducting road-shows/ investor conference(s) for the Project • Negotiated PPP Contract • Project Proposal (in terms of P3A Act)

Phase of the Assignment	Time period (weeks)	Tasks	Deliverables/ Outcome
		<p>The Transaction Advisor shall evaluate pre-qualification documents; technical and financial proposals submitted by the bidders; and assist Pakistan Post in finalizing successful bidder for the Project while ensuring that VFM solution is being provided to the government.</p> <p>The Transaction Advisor shall also assist Pakistan Post in negotiating PPP Contract with the successful bidder.</p> <p>The Transaction Advisor shall assist Pakistan Post in securing requisite approvals under the P3A Act.</p>	
Phase-4: Post Project Signing	24 weeks from the completion of Phase-3	<p>Assist Pakistan Post in facilitating private party in achieving timely financial close for the Project.</p> <p>Assist Pakistan Post in systematically handing-over existing project assets/ operations to the private party under the PPP contract.</p>	<ul style="list-style-type: none"> • Fulfillment of Pakistan Post's conditions precedent for timely financial close for the Project • Smooth transition of Pakistan Post's assets/ operations to the private party

To complete the tasks tabulated above, the Transaction Advisor will be required to perform the following activities:

D. Technical

- Identify, study and evaluate Pakistan Post's existing service offerings, operations and assets which are the subject matter of the Project;

- b. Technical definition of the Project including outlining its scope of works and services, the products and services to be offered; and clearly tabulate the output specifications/ deliverables of the Project;
- c. Establish social and commercial demand for the Project's existing and potential offerings, products and services;
- d. Identify and comprehensively evaluate existing postal infrastructure (including postal counters, Express Post (EP) centers, post offices, collection and sorting operations ,transmission and delivery offices/ operations) that must be transformed into state of the art technologically driven integrated solution covering first mile-counters-pick up, sorting, warehousing, long and short haulage/ transportation and last mile delivery to provide fast, efficient, visible and competitive delivery services under the Project;
- e. Determine the life-cycle costs (including capital, operating and major maintenance costs) attached to the upgrading/ rehabilitating/ overhauling existing EP centers/ post offices, to be transformed into modern technology- driven postal/ logistics centers (covering pick up, booking, sorting/warehousing, transmission and last mile delivery);
- f. Suggest expansion of the existing product/ service range (especially in the backdrop of growth of ecommerce sector both inland and overseas) and determine corresponding investment to be made in the infrastructure/ assets;
- g. Outline human resource requirements and assist Pakistan Post in preparing a comprehensive human resource plan to utilize existing employees of the Pakistan Post in the most optimum fashion;
- h. Compile all the technical parameters of the Project and address them appropriately in the FS, bidding documentation package including RFQ, RFP, draft PPP Contract;
- i. Devise output specifications and service level agreement for the private party;
- j. Assist Pakistan Post in carrying out evaluation of Pre-Qualification documents and Request for Proposal comprising of, *inter-alia*, Technical Proposal & Financial Proposals for selection of the successful bidder;
- k. Assist Pakistan Post in addressing all the technical aspects of the bid proposals while issuing Letter of Intent & Letter of Support for the Project;
- l. Formulate complete set of activities to adequately operate/ manage the Project during the life of concession;

- m. Take into account/address all the technical aspects in the PPP Contract; and
- n. Assist Pakistan Post in reviewing the designs submitted by the private party for the physical works to be performed under the Project

E. Legal

- a. Ascertain legal and regulatory requirements attached to the provision of existing/ potential movable and immovable assets of the Pakistan Post, under the purview of the Project, and whether they are free from all encumbrances and can be leveraged to the private sector for upgradation and/ or operated under the PPP contract;
- b. Prepare complete bidding documentation package including PIM; Pre-qualification document/ RFQ, if so required; RFP; draft PPP contract; and any other agreements subordinate to the PPP contract;
- c. Ascertain any approvals, consents and authorizations required by Pakistan Post/ private party from any government agencies, under their respective applicable laws, to successfully implement the Project;
- d. Assist Pakistan Post in carrying-out transparent, efficient and competitive bidding process for the Project in accordance with the applicable laws and rules;
- e. Assist Pakistan Post in negotiating PPP contract and other subsidiary/additional agreements to the PPP contract, if any, with the successful bidder;
- f. Formulate a Monitoring and Reporting mechanism to ensure compliance of private party actions as prescribed in the PPP contract and devise an adequate payment and penalty mechanism. This mechanism should be simple, effective and practical to expedite the achievement of financial close for the Project;
- g. Identification, allocation and mitigation of the Project risks;
- h. Assist Pakistan Post in negotiating Concession Direct Agreement and other allied agreements with the successful bidder/ lenders;
- i. Assist Pakistan Post in reviewing relevant documentation package for the financial close; and
- j. Assist Pakistan Post in fulfilling conditions precedent related to timely achievement of financial close.

F. Financial

- a. Establish socio-economic and commercial demand of the Project;
- b. Identify and quantify potential direct & indirect revenue sources and revenue drivers pertaining to each revenue source, and make adequate revenue forecasts over the life of the Project;
- c. Carryout option analysis, benefit to cost analysis and value for money analysis for implementing the Project through various private sector participation modalities, including but not limited to, the following:
 - i. Rehabilitate/ Build-Operate-Transfer (R/BOT) – with and without Viability Gap Funding (VGF) options
 - ii. R/BOT – annuity based
 - iii. Build-Transfer/ Deferred payments
 - iv. Other revenue sharing/ (high and medium) risk-sharing model such as Joint Venture structure, or
 - v. Any other PPP model which is most appropriate for the Project.
- d. Carry-out risk assessment for various options and suggest adequate risk-sharing and risk-mitigation mechanism keeping in view various PPP modalities;
- e. Suggest financial transaction structure that is viable and bankable for the private party and offers VFM solution to the government
- f. Prepare robust financial model (addressing base-case and risk-adjusted scenarios for various PPP modalities, including but not limited to R/BOT, Deferred/Annuity Payments, and Hybrid Structures etc.) specifically addressing the following aspects over the entire Project concession period:
 - i. Assumptions, clearly categorized as general, revenues & costs, macro-economic and financial markets,
 - ii. Income statements, statements of cash flows, balance sheets and fixed assets' schedules,
 - iii. Debt schedules and funding sheets highlighting sources and uses of funds,
 - iv. Valuations showing Project Internal Rate of Return (IRR), Equity IRR, Project Net Present Value (NPV), Equity NPV, Payback Periods (Simple and Discounted),

- v. Ratio analysis such as Debt Service, Interest Cover, Project Life Cover, Loan Life Cover and other prominent ratios,
- vi. Sensitivity analysis for critical variables of the Project,
- vii. Financial implications for the public sector accounting for GoP/Pakistan Post revenue share from the Project, corporate taxes etc.,
- viii. Financial results for various PPP modalities identified above, and
- ix. Benefit to cost and value for money analysis for both the public and the private sector.

G. Climate

- i. Under PPP the public sector can take the responsibility of identifying and accounting of climate objectives, while various components of climate finance maybe distributed between the two parties depending on the nature of partnership.
- ii. The public authorities should develop enabling frameworks to support climate finance PPPs and support de-risking of private finance.
- iii. The private sector should be involved during the initial stages of planning, and there should be thorough consultations of public, private as well as civil society stakeholders as this will ensure optimal results, transparency, and establishment of effective financial mechanism.

ANNEX-II

WORKING PAPER FOR TECHNO-ECONOMIC FEASIBILITY STUDY

Define input for techno-economic feasibility study linked to your project objective and problem statement. These inputs can include (not limited to) the following:

1. Material, equipment and resources
2. Technology and machinery
3. Human resource
4. Project size
5. Locations
6. Logistics

Quantify the inputs needed:

	Inputs	What is needed?	How many?	Technical Viability	Cost
1	Material, equipment and resources				
2	Alternate material, equipment and resources				
3	Technology and machinery				
4	Alternate technology and machinery				
5	Human resource				
6	Logistics/ transportation				
7	Data				
8	Software				

Economic Analysis needed:

	Inputs	Cost	Return	Economic Viability	Comments
1	Supply-Demand Analysis				
2	Employment analysis				
3	Provide taxes & duties separately in the capital and operating cost				
4	Cost-Benefit Analysis,				
5	NVP				
6	EIRR				
7	Impact of delays on project cost and Economic viability				
8	Sensitivity analysis				

Design an evaluation criterion like one given below to test technical viability of project:

		Yes	No	N/A	Comments
1	The material, equipment and resources are climate friendly with longer lifespans?				
2	Human resource available is technically sound?				
3	Project size makes it vulnerable to social, economic or climate risks?				
4	Are there any social, economic or climate risks to the project based on its location?				
5	Does the project duration pose any social, economic or climate risks?				
6	Project is resilient to changing climate conditions				
7	Project has ability to cause pollution and emissions?				
8	Data and information easily available for assessments?				
9	Are there design and technological alternatives available?				
10	The technology used is novel?				
11	Is there capacity to adopt climate mitigation and/or adaptation measures or pollution control technology?				
12	Solutions identified such as training of labors?				
13	The equipment used is sensitive to changing weather conditions?				

14	There is political will to support the project?				
15	Women have a key role to play?				
16	Previous projects and experiences have been taken into account?				
	Overall Viability				State Whether “Viable” or “Non-Viable” based on lessons from previous studies and expert judgement

Design an evaluation criterion like one given below to test economic viability of project:

		Yes	No	N/A	Comments
1	What is the financial cost of failure when executing project?				
2	What is the break-even point for profit once project is off the ground, if applicable?				
3	Identification of other market opportunities for your project				
4	Quantifiable output of the project				
5	Payback period				
6	Unit cost analysis				
7	Return on equity (ROE)				
8	Employment analysis				
9	Provide taxes & duties separately in the capital and operating cost				
10	Net present value (NPV) and benefit cost ratio (BCR)				
11	Internal economic rate of Return (IERR)				
12	Sensitivity analysis				
13	Impact of delays on project cost and Economic viability				
14	Identify and quantify potential direct & indirect revenue sources and revenue drivers pertaining to each revenue source, and make adequate revenue forecasts over the life of the Project				
15	Capacity of the projects being implemented in Public/PPP/Private sector.				

16	Supply – demand gap analysis				
17	Determine the risks of the project: Risk management is a huge part of assessing the viability of any project. Perform a risk assessment to outline anything that may pose a threat to success.				
18	Background, engineering data, demography, geography, economy, case study of similar types of project in the area, identify issues.				
19	Identification of other market opportunities for your project through focus groups, surveys, and potential client interviews.				
20	Regional disparity and inequity, gender parity				
21	The manpower requirements by skills during execution and operation of the project be provided.				
22	Securing the site, securing lives, goods, services during construction and post-construction				
23	Security costs can in some proposed investments become quite significant and jeopardize the economic viability of an investment.				
24	Political risks – changes in support schemes, taxation rates, international sanctions				
25	Economic risks – Interest rates, credit risk, option price				
26	Social risks – safety, labor, environmental				
	Overall Viability				State Whether “Viable” or “Non-Viable” based on lessons from previous studies and expert judgement

Top Potential Risks	Solutions

The techno-economic feasibility study results can lead to the following decision:

	Result	Decision
1	The project is technically feasible but economically not feasible	Reconsider another project
2	The project risk is really high, and it is not feasible to pursue it further	Reconsider another project
3	The particular project location is highly vulnerable to climate change	Consider changing project location
4	The project is highly vulnerable to risks currently, but will be feasible in future	Consider delaying the project for more appropriate time
5	The project design and scope will lead to greater climate risks	Consider changing certain design elements or scope of the project to reduce climate impacts
6	Project is feasible	Take up the project as per recommended option through private sector, PPP mode or public investment

Example of In-House Feasibility

Annex-III

				B
FEASIBILITY REPORT FOR UPGRADATION OF GOVERNMENT SCHOOLS				
Primary to Elementary School (Outside Muncipal Limits) New Criteria 17-04-2019				
Name of School	GGES MANGA		EMIS CODE	37320220
Name of UC	TRET			
Name of Markaz	BANN			
PP NO	6			
Name of Tehsil	MURREE			
Population of Uc/Village	2000			

School Level	YES/NO	SCHOOL FOR		Existing Number of Teachers	12
Primary		Boys/Girls		PTC	6
Elementary	YES	Boys/Girls	GIRLS	EST	5
High				ESE	0
STR Of the School	22			SSE	1
				SESE	0

Characteristics of the School					
Total Area(Sq Ft)	4K-7M	Covered Area	2K-7M	Area of Lawn/playground	2K-0M
Total Number of Rooms	10	Rooms used for Teaching	9	Rooms used for office or store.	1
Complete Boundary wall	yes	Functional Electricity	yes	Functional Toilets	yes
Total Toilet Blocks	3				

Enrolment (Last 3 Years)							
Year	2019	2020	2021		2019	2020	2021
K	29	27	34	6	26	26	29
1	30	37	27	7	41	24	32
2	28	29	24	8	31	37	30
3	34	30	28	9			
4	31	37	30	10			
5	29	31	36	Total	279	285	270

Nearest Govt. Schools																
School Name	EMIS Code	Enrolment										Distance	Uc	Markaz		
		K	1	2	3	4	5	6	7	8	9	10				
GGHS MUYARI	37320043	14	12	16	13	23	19	44	32	38	57	35	20KM	MUSYARI		

School Recommended for Up-gradation	Yes	No
School to be up-graded from		
Primary to Elementary (outside Muncipal Limits)		
Primary to Elementary (Within Muncipal Limits)		
Elementary to High (outside Muncipal Limits)	YES	
Elementary to High (Within Muncipal Limits)		
High to Higher (outside Muncipal Limits)		

From Elementary to High School(Outside Muncipal Limits),c(i)

Sr.No.	Parameters	Boys & Girls Schools	
1	Enrolment	20 students each in Class iv & v For Boys Schools 15 students each in Class iv & V for Girls School	
2	Land Requirement	Categories: 1- All big cities /Div Headquarter =1 Kanal 2 All other Districts= 30 Marlas	
3	Land Available	Yes	No
4	Land has to be acquired	Yes	No
5	Distance from nearest Middle School	2 Km for Boys Schools and 1 Km for Girls,	
6	Building structure	8 Class rooms (Including Library, IT Lab, Office Room) =8 Marlas 3 Toilets with Drinking water arrangement= 2 Marlas Assembly area & sports activities= 14 Marlas 1 Store and canteen = 2 Marlas	

Detailed remarks :- RECOMMENDED FOR UPGRADATION UNDER SUFFICIENT BUILDING GROUNDS

The land occupied by the school is 5 Kanal, however according to revenue record 4 Kanal - 07 morla land transferred to SED.

Handwritten: 29/03/22
District Education Officer (WFE)
Rawalpindi

Chief Executive Officer(DEA)
Rawalpindi

TEAM MEMBERS



Mr. Shahid Zia Cheema, Chief (G&E)



Ms. Rizwana Siddique, Deputy Chief (G&E)



Mr. Zeeshan Inam, Assistant Chief (G&E)