



PROJECT PLANNING & PROGRAMMING MANUAL 2025

This publication was compiled and reviewed by the Ministry of Finance of Samoa, with Technical Assistance through the Samoa Australia Partnership (Tautai – Governance for Economic Growth).

There is no restriction on the quotation or reproduction of any part of this publication, provided that the source is acknowledged.

Ministry of Finance
Economic Policy and Planning Division
Private Mail Bag
Apia City Boulevard
SAMOA

Tel: +685-34333

Email: eppd@mof.gov.ws

Project Planning & Programming Manual 2025

Ministry of Finance
Apia, 2025

Preface

The Project Planning and Programming Manual (hereinafter referred to as “the Manual”) has arisen out of the need to provide project analysts and planners in the Government of Samoa, with basic guidelines to project planning and programming and to build a common basis and understanding of project planning procedures throughout the Government. The Manual focuses attention on project planning and programming with the following scope:

- Project identification
- Project formulation
- Project appraisal
- Project implementation and monitoring
- Project evaluation

The Manual also provides information on how project planning and programming is integrated into the budget cycle of the Government. The Manual specifically refers to the responsibility of the various Government Ministries/Agencies in project planning and programming.

Although every effort has been made to provide ‘hands-on’ guidance on project planning and programming, the different characteristics of each Sector are far too diverse to allow a simple mechanical approach to be adopted. Project planners and analysts should bear this in mind when applying the guidelines to the related Sectors.

Procedures and approaches in project planning and programming will continually have to be adjusted to meet future development of the economy and the increasing complexity of the planning process. It will therefore be necessary to update the Manual at regular intervals. In order to accommodate for this future need, the design and layout of the Manual has a loose-leaf format where each chapter is presented as a separate entity, allowing easy adjustments/revisions to be made. A copy of the Manual will also be available on the Ministry of Finance website - www.mof.gov.ws

It is not suggested that the Manual be read from the front to the back cover, but instead consulted frequently in the context of the requirements of the concerned project analysts and planners. The following features of the Manual are intended to simplify access to the Manual:

- The general layout and list of contents is provided at the beginning of the Manual.
- A summary of contents is found at the beginning of each chapter.

Contents

Preface	i
Contents	ii
Abbreviations.....	ii
Chapter 1	3
Introduction.....	3
Chapter 2.....	4
Framework for Project Planning and Programming	4
2.1 Concept of a Development Programme/Project.....	4
2.3 Project Submission.....	9
2.4 The Annual Planning and Budget Cycle	12
2.6 Institutional Responsibilities and Procedures	16
2.7 The Logical Framework.....	21
<i>The Development Process</i>	22
<i>Benefits from the Adoption of the Logical Framework</i>	26
<i>Limitations of Introducing the Logical Framework</i>	27
<i>Using the Logical Framework</i>	28
Annex 1	31
Format for Consultancy Terms of Reference	31
Annex 2.....	32
Format for Terms of Reference (TOR) for a Full-Scale Environmental Assessment	32
Chapter 3.....	36
Project Identification.....	36
3.0 Executive Summary	36
3.1 General.....	36
3.2 Project Identification.....	38
3.3 Project Screening and Preliminary Approval.....	39
3.4 Public Sector Investment Programme.....	40
3.5 Institutional Responsibilities.....	41
Annex 3.....	42
Project Concept Note	42
Annex 4.....	44
Pre-Appraisal Report for a PCN	44
Chapter 4.....	46
Project Formulation	46
4.0 Executive Summary	46

4.1 General.....	46
4.2 Cost-Benefit versus Cost-Effectiveness.....	48
4.3 Formulation of the Feasibility Study	49
4.4 Preparation of the Feasibility Study.....	50
4.5 Institutional Responsibilities.....	50
Annex 5.....	52
Techniques and Approaches for Feasibility Study Preparations	52
Activities Subject to Environmental Impact Assessment.....	66
Annex 6.....	67
Full Project Proposal Report.....	67
Annex 7.....	69
Project Appraisal Report	69
Chapter 5.....	70
Project Appraisal	70
5.0 Executive Summary	70
5.1 General.....	70
5.2 The Approach.....	71
5.3 The Objectives	71
5.4 The Outputs.....	71
5.5 Inputs.....	72
5.6 Conversion	72
5.7 The Format.....	73
5.8 Institutional Responsibilities.....	73
Annex 8.....	74
Memorandum on Project Appraisal	74
Chapter 6.....	75
Project Implementation Monitoring.....	75
6.0 Executive Summary	75
6.1 General.....	76
6.2 The Institutional Setting.....	76
6.3 Project Implementation Monitoring.....	79
6.4 Institutional Responsibilities.....	81
Annex 9: Project Implementation and Monitoring Plan	82
Annex 10: Project Costing Report	83
Annex 11	84
Progress Report.....	84
Annex 12.....	86

Progress Report	86
Annex 13.....	87
Memorandum on Progress Report	87
Annex 14.....	88
Project Completion Report	88
Annex 15.....	89
Appraisal of Project Completion Report.....	89
Annex 16.....	90
Memorandum on Project Completion Report.....	90
Chapter 7.....	91
Project Evaluation.....	91
7.0 Executive Summary	91
7.1 General.....	92
7.2 Formal Project Evaluation	93
7.3 The Project Cycle and Types of Evaluations.....	95
7.5 Institutional Responsibility	97
Annex 17.....	99
Evaluation Report	99
Annex 18.....	101
Appraisal of Evaluation Report.....	101
Annex 19.....	103
Memorandum on Project Evaluation	103
Annex 20: Ongoing Capital Investment Projects.....	104
Annex 21: Ongoing Technical Assistance Projects.....	105
Annex 22: Ongoing Human Resource Development Projects	106
Annex 23: Pipeline of Capital Investment Projects	107
Annex 24: Pipeline of Technical Assistance Projects	108
Annex 25: Pipeline of Human Resource Development Projects.....	109
Annex 26: Capital Investment Scheduling of Ongoing Projects.....	110
Annex 27: Capital Investment Scheduling of Pipeline of Projects	111
Appendix 1	112
The Logical Framework Step by Step.....	112
Appendix 2.....	128
Framework for Economic Analysis.....	128

Abbreviations

ACC	- Aid Coordination Committee
ACMD	- Aid Coordination and Management Division of the Ministry of Finance
ADB	- Asian Development Bank
BFPD	- Budget and Fiscal Policy Division of the Ministry of Finance
BC	- Budget Committee (PSC, Audit Office, MOF (EPPD, BFPD, ACMD, DMD))
CDC	- Cabinet Development Committee
CF	- Conversion Factor
CI	- Capital Investment
DMD	- Debt Management Division of the Ministry of Finance
DCF	- Discounted Cash flow
EA	- Executing Agency
EPPD	- Economic Policy and Planning Division of the Ministry of Finance
EIA	- Environmental Impact Assessment
EIRR	- Economic Internal Rate of Return
EU	- European Union
FIRR	- Financial Internal Rate of Return
HRD	- Human Resource Development
IA	- Implementing Agency
IPPC	- Integrated Project Planning Cycle
IRR	- Internal Rate of Return
KSO	- Key Strategic Outcome
MOF	- Ministry of Finance
MFAT	- Ministry of Foreign Affairs and Trade
MNRE	- Ministry of Natural Resources and Environment
MPE	- Ministry of Public Enterprises
MWCSD	- Ministry of Women, Community and Social Development
MWTI	- Ministry of Works, Transport and Infrastructure
NPV	- Net Present Value
PBC	- Planning and Budget Committee (EPPD, BFPD, ACMD, DMD) of MOF
PStC	- Project Steering Committee
PCN	- Project Concept Note
PCR	- Project Costing Report
PDS	- Pathway for the Development of Samoa
PPP	- Project Planning and Programming
PSC	- Public Service Commission
PSIP	- Public Sector Investment Programme
SAC	- Sector Advisory Committee
SCF	- Sector Coordinators' Forum
SCD	- Sector Coordination Division
TA	- Technical Assistance
TOR	- Terms of Reference

Chapter 1

Introduction

The successful implementation and on-going operation and management of projects are critical components in the development process. The task of identifying, preparing, and implementing sound projects must be thought out carefully. If projects are not well planned from the inception and selection stage, the development process and sustainability of economic growth will be affected.

Moreover, it is important to institutionalise the roles and responsibilities of the various ministries and agencies within Government, which are involved in the management of the related stages of the project cycle. The Manual introduces all phases of the project cycle and addresses Project Planning and Programming (PPP) with the following scope:

- Project identification
- Project formulation
- Project appraisal
- Project implementation monitoring
- Project evaluation

It is the aim of the Manual to provide common PPP guidelines for related stages of the project cycle. This will facilitate a uniform approach and presentation of PPP throughout the various ministries and agencies of the Government of Samoa, therefore improving consistency in the quality of PPP. The use of the Manual is applicable to all Government Ministries/Agencies which request Government financial support through the annual budget allocations, development partner assistance or a Government financial guarantee. In this context, the Manual facilitates an organised planning system to utilise scarce resources to achieve the development priorities of the Government.

Furthermore, the Manual identifies the roles and responsibilities of the individual ministries and agencies involved in PPP. This will facilitate a clear allocation of responsibility and the use of resources.

Although the Manual provides hands-on guidance on project planning and programming, the diversity of each sector precludes a mechanical, one-size-fits-all application. In particular, large, complex infrastructure undertakings – such as Design-Build-Operate-Maintain (DBOM) schemes – must be screened under the Public-Private Partnership Framework (implemented by the Ministry for Public Enterprises) to confirm their suitability as delivery models for Public Private Partnerships.

Chapter 2

Framework for Project Planning and Programming

This chapter addresses some of the major features of the Manual and sets out the framework within which the Manual has been prepared.

2.1 Concept of a Development Programme/Project

Under this heading is given a definition of a programme and a project which consists of the following categories:

- Capital investment projects
- Technical assistance projects
- Human resource development projects

The term “development program” is defined within the following context:

- It is a separate identity which can be distinguished from other programmes or activities;
- It has broad and long-term development objective(s);
- It operates on the basis of annual/multi-annual budgets; and
- It has a number of interrelated activities/projects which collectively are designed to reach the broader programme objective(s).

The term “development project” is defined within the following context:

- It is a separate identity which can be clearly distinguished from other projects or activities;
- It has clearly defined development objectives and identifiable costs and benefits;
- It has a defined and limited implementation period;
- It is a complete project (i.e.) it incorporates all the components needed to obtain the project benefits and achieve the stated development objectives; and
- There is a clear allocation of responsibility for the implementation and the use of resources.

The above definition of a programme and a project will facilitate the application of an organised programme/project planning system in the use of scarce resources. This will help to maximise the achievement of the development objectives through programme/project identification, formulation, appraisal, and monitoring. It will also assist in the evaluation of programmes and projects.

In order to focus attention on programmes/projects which are important for the economy and the development process, only programmes/projects above a certain total cost will be required to follow certain procedures outlined in the Manual. For this purpose, programme/project thresholds have been approved as per the National Planning Framework. Although programmes/projects within each level will in principle have to follow the same PPP steps, the scrutiny of application will vary.

It is important that any programme/project is identified on the basis of established national and sectoral policies and strategies, as presented in the National Development Plan (Pathway for the Development of Samoa (PDS)) and specific Sector Plans.

2.2 The Project Cycle

Under this heading, an overview is given of the four stages of the project cycle in Samoa, including the main actors and their responsibilities, and an indication of the time duration to complete each project phase/stage.

Consistent progress of the development process relates, *inter alia*, to the implementation of an interrelated series of development projects. A thorough understanding of the role, procedures, and methods of the PPP concept is therefore essential for those responsible for planning, implementing, and managing development projects. To clarify the procedures, methods, and alternatives relating to the planning and management of projects, it is necessary to have a framework of the elements involved in project planning.

As outlined in Section 2.2, a project has:

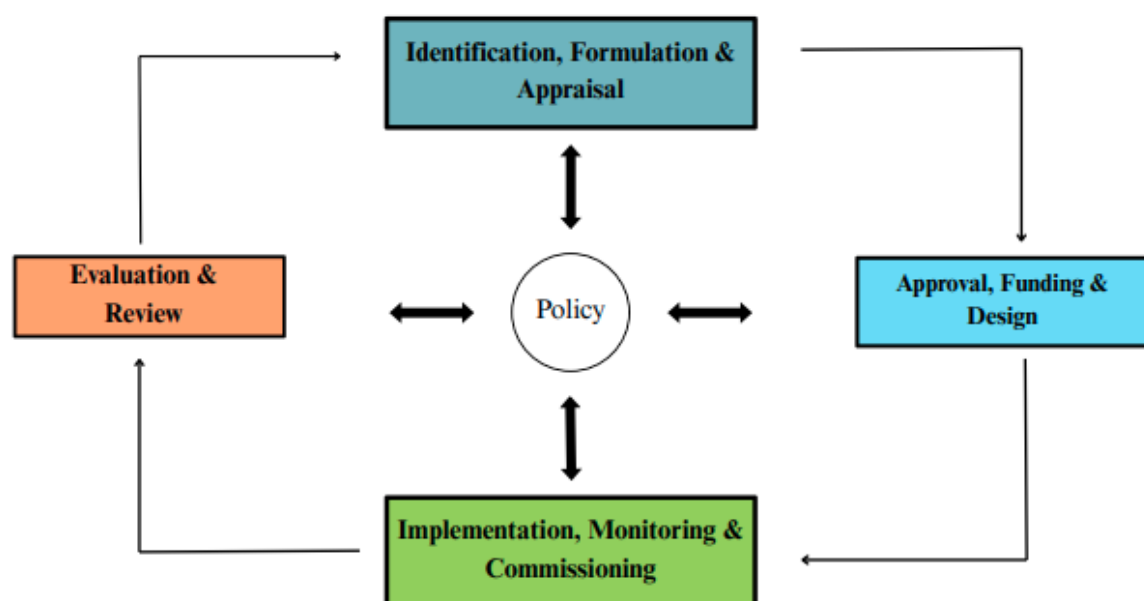
- (i) an objective or goal to achieve;
- (ii) an investment of resources for future benefits;
- (iii) a definite time limit; and
- (iv) a specific physical boundary.

Projects having such characteristics undergo several stages/phases of activities, which take place between project conception and project completion. The stages/phases constitute a specific sequence of activities which is cyclic in nature and is referred to as the project cycle.

As all the phases of the project cycle are consecutive and interrelated activities, the framework adopted is based on the concept of the Integrated Project Planning Cycle (IPPC). The IPPC is a conceptual tool which includes all the elements that constitute the life of a development, from its conception to its evaluation after completion. The IPPC has been adopted to illustrate the steps and procedures of PPP. Figure 1 shows the IPPC divided into four major phases as follows:

- | | |
|-----------|---|
| Phase I | : Identification, Formulation, and Appraisal |
| Phase II | : Approval, Funding, and Detailed Design |
| Phase III | : Implementation, Monitoring, and Commissioning |
| Phase IV | : Evaluation and Review |

Figure 1: Integrated Project Planning Cycle: 4 Phases



Although a project will normally emanate from national policy and the related sector plan, the process of project implementation is in the hands of the project management. It is therefore essential to have a two-way communication system between the policy decision makers and the project management. This is achieved through the establishment of a Project Steering Committee (PStC) which – where necessary – must be established to ensure that the outcome of the project is in line with the related Government policies and strategies. This is illustrated by two-way communications and authority flow in Figure 1 and it ensures that all phases involve details of consultations among all parties concerned.

A brief description of each of the four phases of the project cycle, the appropriate time estimated for the completion of each stage/task, and the related responsible Government Ministries/Agencies and/or Committees are given below.

Phase I: Identification, Formulation, and Appraisal

Tasks	Description	Approximate time estimate for completion (months) ¹	Responsible Government Agency/Committee
Project Identification	• Identification of project ideas.	1 ²	Government Ministry/Agency
	• Translation of project ideas into a Project Concept Note (PCN).	1	Government Ministry/Agency ³
		1	

¹ Depending on the scope and complexity of the project. Duration is only a time estimate based on previous experience, but it could be more.

² Assuming that a Sector Plan or Policy Paper is available

³ Projects identified early for Public Private Partnership suitability to be referred to and screened through MPE's Public Private Partnership Framework.

	<ul style="list-style-type: none"> Preliminary assessment and approval of PCNs and prioritising of project selection for formulation into a full project proposal. 		<ul style="list-style-type: none"> Economic Policy and Planning Division, MOF (EPPD) Planning and Budget Committee, MOF (PBC)⁴ Sector Advisory Committee⁵ Cabinet Development Committee (CDC)⁶
Project Formulation	<ul style="list-style-type: none"> Formulation of approved PCN into Project Proposal.⁷ 	6	Government Ministry/Agency
Project Appraisal	<ul style="list-style-type: none"> Appraisal of Project Proposal. 	2	EPPD

Phase II: Approval, Funding, and Design

Tasks	Description	Approximate time estimate for completion (months)	Responsible Government Agency/Committee
Project Approval	<ul style="list-style-type: none"> Approval of appraised projects. 	2	Cabinet Development Committee ⁸
Funding	<ul style="list-style-type: none"> Funding of approved projects involves the identification, coordination, and allocation of internal and/or external funds. 	3	PBC and Aid Coordination Committee (ACC)
Design⁹	<ul style="list-style-type: none"> Detailed design (facility specifications, implementation plan, etc.) for preparation of Tender documents. 	3	Government Ministry/Agency

⁴ Approved pre-appraised PCN projects with total costs of less than or equal to \$200,000 tala to be submitted to PBC, MOF to solicit funding.

⁵ Approval of PCNs above \$200,000.00 tala but less than \$500,000 tala in total project costs by Sector Advisory Committee (SAC) into a full-fledged Project Proposal.

⁶ Approval of PCNs above or equal to \$500,000 tala in total project costs for development by CDC into a full-fledged Project Proposal.

⁷ A Project Proposal that requires an Environmental Impact Assessment (EIA) report will have to be submitted to MNRE (for their appraisal of such EIA report) while simultaneously forwarding to EPPD for their Project Appraisal).

⁸ Approval of projects with total costs of more than or equal to \$500,000 tala for implementation and to solicit financing sources.

⁹ Design at this stage would normally relate to detailed design of capital investment projects as the conceptual design parameters (e.g.) technical assistance projects are normally established and finalised during the Project Formulation stage.

Phase III: Implementation, Monitoring, and Commissioning

Tasks	Description	Approximate time estimate for completion (months)	Responsible Government Agency/Committee
Project Implementation	<ul style="list-style-type: none"> Establishment of a Project Steering Committee (PStC). 	1	Government Ministry/Agency
	<ul style="list-style-type: none"> Final review of project design and implementation plan. 	1	PStC
	<ul style="list-style-type: none"> Tendering and tender award. 	3	Tenders Board
	<ul style="list-style-type: none"> Assignment of responsibility and authority for implementing the project in terms of personnel, legal, financial, organisational, procurement, and administrative matters. 	2	Government Ministry/Agency
	<ul style="list-style-type: none"> Physical implementation of project based on procedures set during the earlier phases. 	24 ¹⁰	Government Ministry/Agency
Project Monitoring	<ul style="list-style-type: none"> Supervision and monitoring to provide feedback to the project management and the policy makers. 	24	Government Ministry/Agency
Project Commissioning	<ul style="list-style-type: none"> Transfer the completed project to the operating government agency. 	2	Government Ministry/Agency (Implementing Agency)
	<ul style="list-style-type: none"> Preparation of the Project Completion Report. 	2	

¹⁰ Assuming a two-year implementation period.

Phase IV: Evaluation and Review

Tasks	Description	Approximate time estimate for completion (months)	Responsible Government Agency/Committee
Project Evaluation	<ul style="list-style-type: none">Evaluation of the intended and unintended impacts of the project after the project has been operating for some time. Alternatively, this may take place during project implementation in case project implementation encounters serious problems which may impede the project reaching its objectives.	3	CDC
Review/refinement of policy and planning issues	<ul style="list-style-type: none">Refinement of policy and planning procedures based on the experiences and lessons learnt.	2	CDC and EPPD

2.3 Project Submission

Under this heading is given a reference to project submission of a Project Concept Note (PCN).

For projects with total costs as follows:

- A favourably pre-appraised PCN by EPPD, MOF of less than or equal to \$200,000 tala will be forwarded to the Planning and Budget Committee (PBC) for their expedited approval for implementation and to solicit operational funding.
- A favourably pre-appraised PCN by EPPD of more than \$200,000 tala but less than \$500,000 tala is passed on to the Sector Advisory Committee (SAC) for their consideration and decision to develop it into a full-fledged Project Proposal.
- More than or equal to \$500,000 tala in total project costs, a favourably pre-appraised PCN by the technical arm of the Cabinet Development Committee (CDC) Secretariat (EPPD), will be referred back to the SAC to develop it further into a Full Project Proposal (FPP).
- FPPs prepared by Government Ministries/Agencies will come back to the EPPD for their full appraisal prior to submission to the CDC for project approval for implementation and to solicit funding (through the PBC or ACC) if it has not been identified.

Following the nature of the project cycle (Section 2.2), projects will be identified and formulated into a Project Concept Note (PCN) by the Government Ministry/Agency on the basis of national policies and sectoral strategies. Once a PCN has been formulated (Annex 3), it will be forwarded to the technical arm of the CDC Secretariat - MOF's Economic Policy and Planning Division (EPPD).

The EPPD is to administer the related PCNs as follows:

- (i) Undertake a pre-appraisal of the PCN (Annex 4) for projects below or equal to a total cost of \$200,000 tala and submit to the Planning and Budget Committee (PBC), MOF for their approval and for soliciting *domestic* funding or to ACC for *foreign* funding considerations.
- (ii) Conduct a pre-appraisal of the PCN for projects above \$200,000 tala but below \$500,000 tala, and submit favourably pre-appraised PCNs to the SAC for their consideration and subsequent decision to develop it into a full-fledged Project Proposal by the concerned government ministry/agency.
- (iii) Commence a pre-appraisal of the PCN for projects above or equal to \$500,000 tala and submit to the CDC for their consideration and subsequent development into FPP by the concerned Government Ministry/Agency.

Favourably pre-appraised projects by EPPD will be returned to the concerned Government Ministry/Agency for FPP formulation. Unfavourably pre-appraised projects will also be returned (as a pre-appraisal document) to the Government Ministry/Agency concerned for any restructuring or for further refinements and subsequent resubmission.

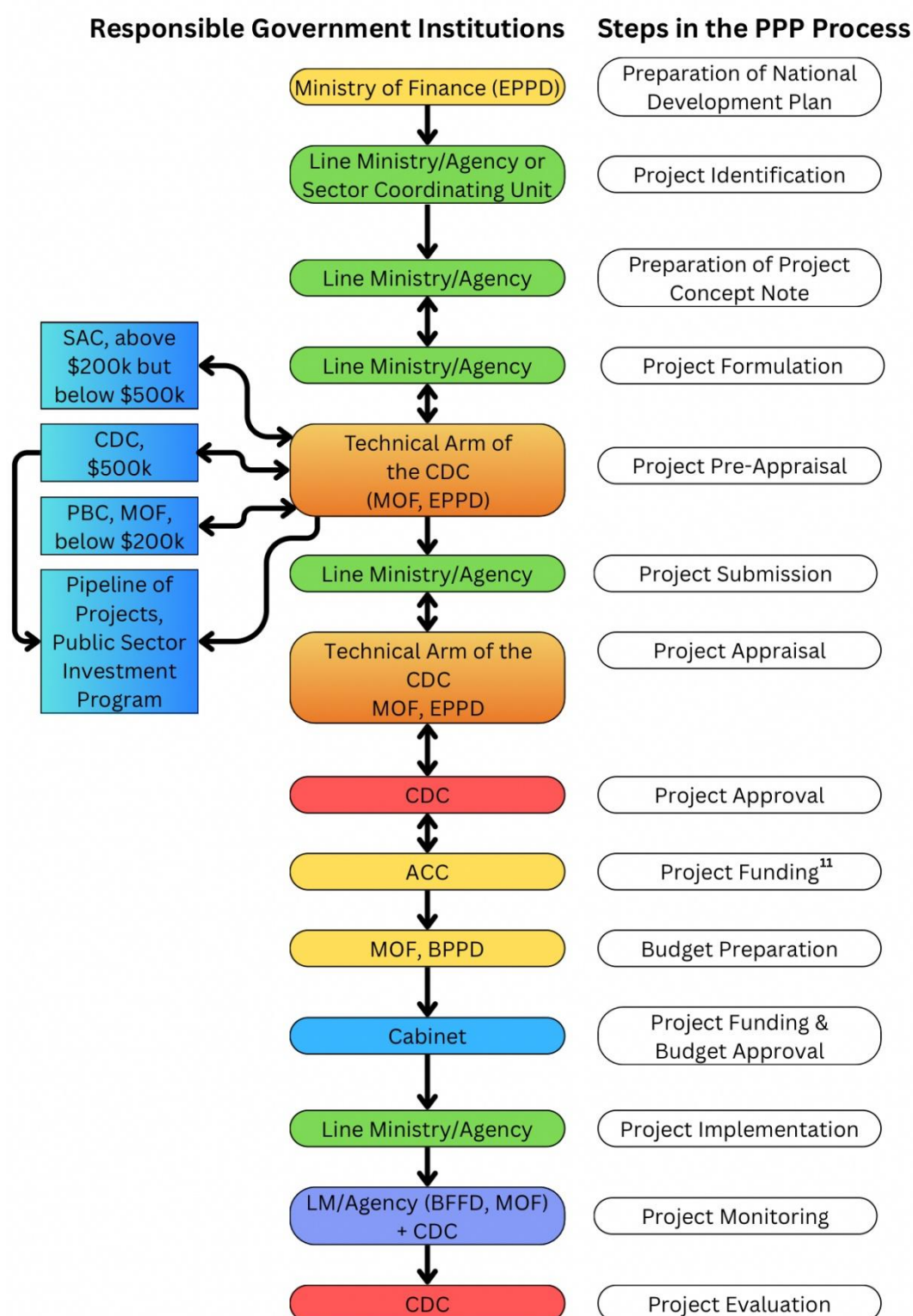
Favourably appraised projects by the PBC, MOF are approved for implementation and put through either the Budget process for local or domestic funding or through ACC for any foreign funding components.

The process of project submission and the further linkages with the PPP process through project approval and project implementation is shown diagrammatically in Figure 2.

It should be noted when the Government considers that a disaster or emergency situation has or is going to occur, the concerned Government Ministry/Agency is to act as follows in respect of a project submission.

- (i) Preparation of the related PCN for submission to the Chair of the Disaster Advisory Committee with a request for support of the proposed action programme.
- (ii) Copy the technical arm of the CDC Secretariat (EPPD) which on a priority basis will undertake a pre-appraisal of the PCN (Section 3.5) and liaise with the Chair of the Disaster Advisory Committee or as deemed appropriate.

Figure 2: Diagrammatic Presentation of Project Submission and Further Steps in the PPP Process



2.4 The Annual Planning and Budget Cycle

Under this heading, an explanation is given that a project enters the annual planning and programming cycle as a ministry output at the start of project implementation for the purpose of ensuring the availability of project funds (domestic and foreign currency funds) during project implementation.

The planning and budget cycle shown in Figure 3 sets out in a simplified schematic diagram, the key stages in the annual planning and budget formulation process, which is part of the Ministry of Finance Corporate Plan.

The review of the PDS, Government policies, and sector priorities (being the basis for the identification of projects) is an event undertaken by the Ministry of Finance in consultation with Government Ministries/Agencies during the early stages of the budget year. The identification of projects is a continuous process based on the latest version of the PDS, related Government policies, and Sector Plans. In this context, project identification, formulation, and appraisal are on-going processes parallel, but nevertheless complementary, to the planning and budget cycle. The project planning process is normally beyond the time frame stipulated in the planning and budget cycle as the lead time for some projects under planning may range from between one to three years.

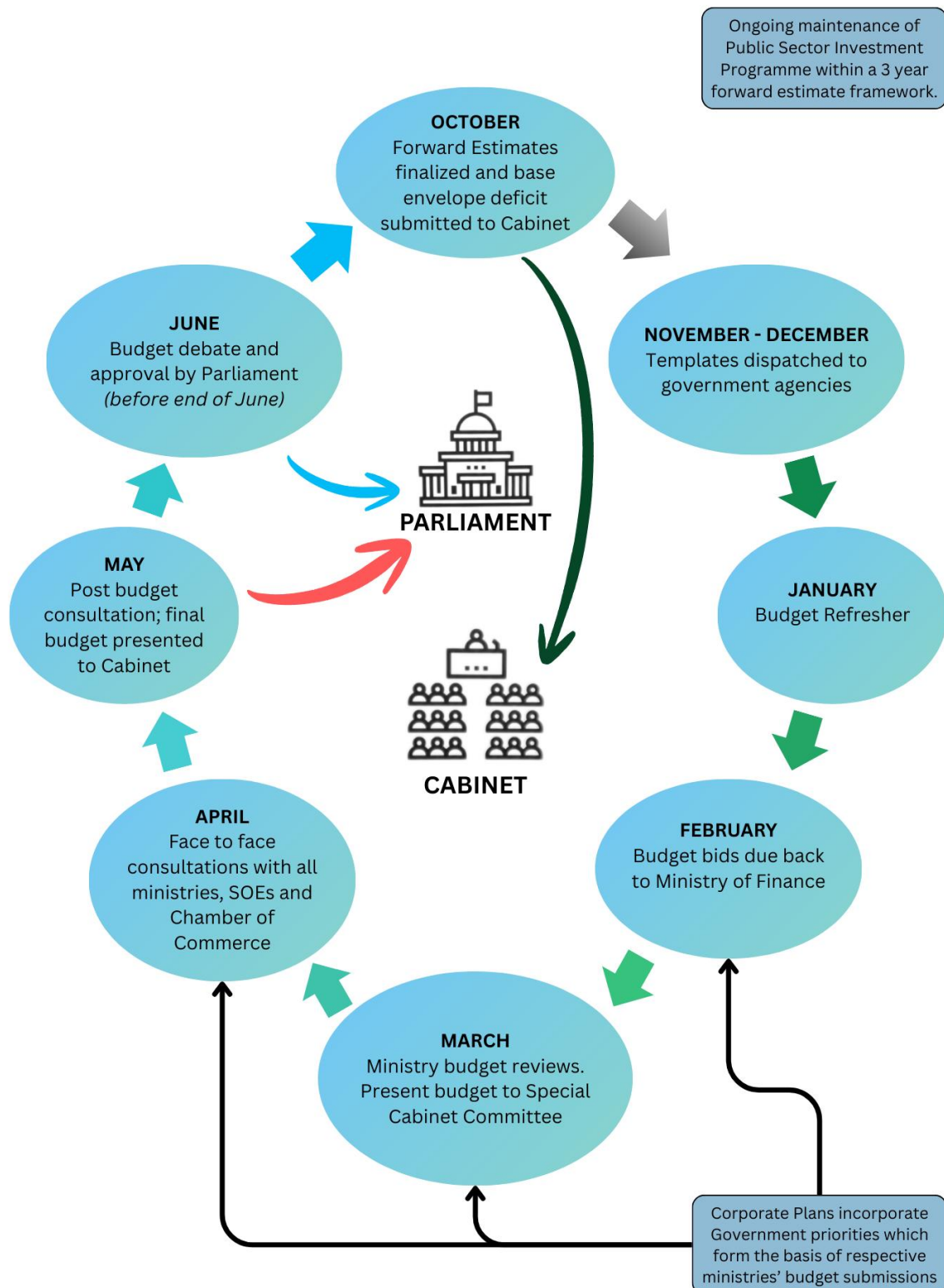
The first time a project will be associated with the planning and budget cycle is when a project idea (prepared PCN) is submitted to the technical arm of the CDC Secretariat (EPPD) for pre-appraisal. At this juncture, the PBC of MOF will assess the financial implications of the proposed project idea particularly as regards to the project's proposed domestic funding requirements for the project (task 2 during Phase I of the Project Cycle). If the PBC, MOF endorses the funding (for project implementation and recurrent costs when the project is in its operational phase), this constitutes the MOF endorsement of budgetary support (if applicable) to the project. The applicable funds will enter MOF's forward budget and planning and budgetary stipulations (i.e.) Public Sector Investment Programme (PSIP).

After pre-appraisal, project formulation, appraisal, and approval of the project by the CDC, the MOF will confirm the required budgetary allocations (if applicable). This will form the basis for submitting the project to the ACC for funding consideration of its stipulated foreign currency requirements. When the foreign and domestic funding requirements of a project have been clarified and when project implementation starts, the project will be included in the annual budget preparation as a Government Ministry/Agency output.

With the above mechanism, fully funded projects will enter the planning and budget cycle at any time during the budget year. A project under implementation with its forecasted annual domestic and foreign funding requirements will remain as a Government Ministry/Agency output in the budget cycle until the project has been commissioned. This will ensure disbursement of funds as required during project implementation. When the project has been commissioned, it will enter the annual budget cycle as a Government Ministry/Agency output/sub-output and monitored for its performance through the normal budget monitoring procedures of the MOF.

¹¹ Projects approved as Public Private Partnerships by the CDC, will explore such funding options (upon screening and analysis under MPE's Public Private Partnerships Framework) through the usual ACC process.

Figure 3: Annual Planning and Budget Cycle



2.5 Public Sector Investment Programme

Under this heading is given an outline of Government's financial resources allocations for its investments. The Public Sector Investment Programme (PSIP) represents project scheduling of on-going and pipeline capital investment projects in a three-year implementation perspective.

2.5.1 General

Ongoing projects and a pipeline of new project proposals collectively constitute the three-year rolling PSIP. This is prepared by the EPPD in close consultation with Government Ministries/Agencies.

The preparation of a revolving PSIP is important for four reasons:

- i) It will provide information on Government's priority sectors and projects for donor consultations.
- ii) It will provide an overview of on-going public sector investments for implementation in a three-year perspective.
- iii) It will provide an overview and a schedule of public sector pipeline investments in a three-year perspective.
- iv) It will enable the Government to obtain a balanced level of capital investment throughout the plan period for forward budgetary planning of Government's financial resources.

The preparation of a PSIP in a three-year perspective is essential to schedule future allocations of Government funds in a prioritised and organised manner in line with Government's capacity to implement projects to achieve its national development priorities.

2.5.2 On-going Projects

The registration of on-going projects is based on the updating of the latest Progress Reports submitted by Executing Agency on projects above or equal to a total cost of \$500,000 tala and reports from PBC, MOF for projects with a total cost between \$200,000 and \$500,000 tala. This information is to be compiled in Annexes 18, 19 and 20 for on-going capital investment, technical assistance, and human resource development projects respectively.

2.5.3 Pipeline of Projects

The establishment of the Pipeline of Projects in a three-year perspective is to be made annually and presented at the start of the budget year.

The Pipeline of Projects consists of three categories of projects

- Below or equal to \$200,000 tala: EPPD, MOF to pre-appraise projects and favourably pre-appraised ones are submitted to the PBC to solicit funding.
- Between \$200,000 and \$500,000 tala: EPPD, MOF to pre-appraise projects and favourably pre-appraised ones are provided to the Sector Advisory Committee (SAC) for their approval to develop it further into a full-fledged project proposal.
- More than or equal to \$500,000 tala: EPPD pre-appraised projects above this threshold are approved by CDC for development into a full-fledged project proposal.

Once FPPs have been pre-appraised and/or appraised by EPPD and approved by CDC, the projects are to be allocated to the Pipeline of Projects prepared in the format given as Annexes 21, 22 and 23 for capital investment, technical assistance, and human resource development projects respectively.

2.5.4 Public Sector Investment Programme

The preparation of the PSIP involves:

- projects under implementation (on-going projects); and
- new project proposals allocated to the Pipeline of Projects.

The scheduling of on-going projects is to be based on the latest Progress Reports submitted by the Executing Agencies (Annex 11) and prepared in the format given in (Annex 24). The scheduling of new projects is to be based on the following criteria of prioritising and scheduling projects for implementation:

- i) Project implementation policies and strategies outlined in the national development plan (PDS) and other Government policy statements.
- ii) The tentative financial and economic returns of individual projects.
- iii) The opening up of immediate development constraints and bottlenecks.
- iv) Availability of funds from both domestic and external sources taking account of the need to restrain public indebtedness.
- v) The absorption capacity of the economy and the machinery of Government to implement and manage new projects.

It should be noted that the tentative financial and economic returns of individual projects together with the priority sectors of the Government, will be important considerations in the ranking and selection of projects for implementation.

The scheduling of the pipeline of capital investment projects is given in Annex 27.

The structure of the PSIP in a three-year perspective is given in Annexes 20 to 25.

2.5.5 Institutional Procedures

The draft pipeline of projects and PSIP are to be prepared by EPPD in close collaboration with the concerned Government Ministry/Agency. (the Executing Agencies) The draft pipeline of projects and the PSIP is to be routed through the different funding modalities such as the Budget and Fiscal Policy Division (BFPD), Aid Coordination and Management Division (ACMD), and Debt Management Division (DMD) for verification and update of information on its development. It may also be funnelled through the Aid Coordination Committee (ACC) for information before submission to CDC for their consideration. Once the draft is amended/endorsed by the CDC, it will be used as an indicative planning document in Government's interaction with the Development Partner community and for the formulation of approved development projects for budgeting purposes. This process is to be managed by MOF. The allocation of domestic funds (as appropriate) is to be made through the PBC, MOF. The allocation of external funds is to be made through the system of aid coordination and

Development Partner consultations. The overall process of funding allocation is to be coordinated through the ACC.

2.6 Institutional Responsibilities and Procedures

Under this heading is given an outline of the roles/responsibilities and TOR of the following Government Ministries/Agencies and committees in the context of the PPP.

- Cabinet Development Committee
- Aid Coordination Committee
- Ministry of Finance
- Ministry of Foreign Affairs and Trade (MFAT)
- Public Service Commission (PSC)
- Ministry of Natural Resources and Environment (MNRE)
- Ministry of Women, Community and Social Development (MWCSD)
- Government Ministries/Agencies
- Planning and Budget Committee (PBC), Ministry of Finance

General

The Government Ministry/Agency responsible for executing the various phases of the project cycle (Section 2.3) and links with other relevant agencies are set out diagrammatically in Figure 2.

The diagram highlights in a simple way the main institutions and committees and their responsibilities in the project cycle as follows:

- Cabinet Development Committee has the overall project approval and monitoring responsibility.
- Government Ministries/Agencies are responsible for the preparation of their Sector Plans, project identification, project formulation, project design, and project implementation and monitoring.
- Ministry of Finance is responsible for the preparation of the National Development Plan (PDS), project idea approval, project appraisal, and project implementation as well as project monitoring.
- Ministry of Foreign Affairs and Trade (together with MOF) is responsible for donor consultations and the subsequent negotiations with donors providing grant aid to Samoa (mainly bilateral donors).
- Ministry of Public Enterprises is responsible for project screening for potential delivery as a Public Private Partnership. CDC-approved projects are submitted to ACC for potential financing strategies and procurement as Public Private Partnership projects.
- Aid Coordination Committee (ACC) is responsible for the allocation of both foreign – and in conjunction with MOF – the domestic financial requirements for project implementation.
- Project Steering Committee (PStC) has a supervisory role vis a vis the Government Ministries/Agencies during project implementation.

The Roles and Terms of Reference of Government Institutions and Committees

The scope and TOR of Government institutions and committees outlined in the table below, are restricted to the related field of Project Planning and Programming. Detailed functions are provided in the Government of Samoa National Planning Framework.

Cabinet Development Committee

Chairperson: Prime Minister

Deputy Chair: Deputy Prime Minister

Secretariat: Ministry of Finance (EPPD)

Composition: Cabinet Ministers and Heads of Government Ministries and Agencies (as appropriate)

Scope and Terms of Reference:

Act as Cabinet PPP authority and in this capacity:

- Review the broad macro-economic framework, assumptions and philosophy for the formulation of the National Development Plan (PDS), and Sector Plans and priorities (Sector Planning Manual);
- Endorse and/or make decisions on projects appraised by EPPD (Chapter 5);
- Monitor the implementation of development projects (Chapter 6); and
- Cooperate on decision to undertake project evaluation (Chapter 7).

Aid Coordination Committee

Chairperson: Prime Minister

Deputy Chair: Minister of Finance

Secretariat: Ministry of Foreign Affairs and Trade, and Ministry of Finance (ACMD)

Composition: Ministry of Foreign Affairs and Trade, Ministry of Finance, Ministry of the Prime Minister and Cabinet, and Public Service Commission.

Scope and Terms of Reference:

- Liaise with the development partner community and provide oversight of Samoa's Official Development Assistance;
- Consider, negotiate, and allocate funding requirements for project implementation; and
- Select appropriate development partner for financing of CDC-approved projects.

Planning and Budget Committee, Ministry of Finance

Chairperson: CEO, Ministry of Finance

Deputy Chair: DCEO Policy, Ministry of Finance

Secretariat: BFPD

Composition: (BFPD, EPPD, ACMD, DMD), MOF

Scope and Terms of Reference:

- Review and endorse financial implications of project ideas (PCNs) (Chapter 3); and
- Approve domestic financial allocations for project implementation.

Government Ministries/Agencies

Scope and Terms of Reference

- Contribute to the preparation of Sector Plans (as per Sector Planning Manual);
- Identify project ideas and prepare PCNs (Chapter 3);
- Prepare TOR for consultancy services;
- Formulate projects for implementation (Chapter 4);
- Act as Executing Agency for project implementation (Chapter 6);
- Prepare Project Monitoring/Progress Reports; and
- Prepare Project Completion Report together with BFPD.

Ministry of Finance

Scope and Terms of Reference of EPPD

- Prepare and review the National Development Plan (PDS);
- Appraise Sector Plans and priorities (Sector Planning Manual);
- Participate as a member of the ACC and PBC, MOF to solicit funding for development projects;
- Undertake pre-appraisal of PCNs (Chapter 3);
- Prepare annual Pipeline of Projects and PSIP;
- Undertake appraisal of projects (Chapter 5);
- Act as technical arm of the CDC Secretariat, inter alia, prepare the Memorandum (Annexes 7 and 8) as appropriate for submission to CDC;
- Finalize TOR for consultancy services (prepared by Government Ministries/Agencies); and
- Participate as a member of the PStC (as appropriate).

Scope and Terms of Reference of BFPD

- Participate as member of PStC (Chapter 6);
- Prepare Memorandum (Annex 10) on Project Costing for submission to CDC;
- Finalise Financing Agreements for project implementation; and
- Member of the Budget and Planning Committee to solicit funding for development projects.

Scope and Terms of Reference of ACMD

- Member of the PBC, MOF to approve pre-appraised PCNs and solicit their funding;
- Joint Secretariat of ACC; and
- Undertake consultations with donors.

Scope and Terms of Reference of DMD

- Member of the PBC, MOF to approve pre-appraised PCN and solicit their funding; and
- Undertake consultations with development partners for domestic and foreign loans.

Public Service Commission

Scope and Terms of Reference

- Participate as member of ACC;
- Prepare and review Human Resources Development Programme; and
- Provide input as required for project appraisals, regarding human resource management and development.

Ministry of Foreign Affairs and Trade

Scope and Terms of Reference

- Act as joint Secretariat of ACC; and
- Undertake consultations with bilateral donors and multilateral donors (as appropriate).

Ministry of Natural Resources and Environment

Scope and Terms of Reference

- Assess whether there is a need for an EIA report or not for PCNs; and
- Undertake appraisals for EIA reports of projects submitted by Government Ministries/Agencies.

Ministry of Women, Community and Social Development

Scope and Terms of Reference

- Assess the impact of social issues and their implications on stakeholders as required for project appraisals.

Project Steering Committee

Scope and Terms of Reference

- Act as consultative forum for all phases of the project cycle;
- Coordinate and assess project implementation issues (Chapter 6); and
- Act as advisory capacity to project Executing Agency during project implementation.

2.6.1 PPP Capacity and the Use of Consultants

Under normal circumstances, Government Ministries/Agencies will be expected to have in-house capability and capacity to identify project ideas on the basis of related Sector Plans and policies and prepare their own PCNs¹². In carrying out their functions and responsibilities beyond the preparation of PCNs, it will normally be necessary for Government Ministries/Agencies to engage local/external consultants to assist in project formulation and design. Consultants should be advised to use relevant procedures and formats outlined in this Manual.

¹² It should be noted that EPPD acts as an advisory capacity vis a vis Government Ministries/Agencies' efforts to improve their approach and capacity in project identification and formulation, and particularly in the clarification of issues in this Manual and the Sector Planning Manual.

The use of consultants in the preparation of a feasibility study and eventually the formulation of a project has obvious advantages. Apart from reducing the immediate workload of the concerned Government Ministry/Agency, which normally is not expected to have this in-house expertise or capacity, it may bring new thinking into the process of project design. Notwithstanding this, there is nevertheless a possible danger that the final project may receive an orientation towards the perception (and sometimes interest) of the consultant. This may in particular be the case when a consultant is financed through a foreign donor. To avoid such a situation, it is essential that the preparation of the TOR which is the responsibility of the concerned Government Ministry/Agency is carried out in consultation with EPPD, MOF. It would be advisable to establish a working group (e.g.) a Project Steering Committee (PStC) of multiple disciplinary representation (as appropriate) supervising the work of the consultant through the concerned Government Ministry/Agency. The Project Steering Committee would normally (at this stage of the project cycle) be chaired by the concerned Government Ministry/Agency.

In order to ensure funding of consultancy services for project formulation and/or other tasks required for the application of the Manual, the concerned Government Ministry/Agency is to consider this as a project on which basis a PCN needs to be prepared, and submitted to the technical arm of the CDC Secretariat (EPPD) for pre-appraisal. Normally, requests for the funding of consultancy services will go directly (from the technical arm of CDC Secretariat) to ACC for soliciting funding. Alternatively, the request for consultancy services may be made in and as part of the original PCN. The TOR of the proposed consultancy is to be prepared by the concerned Government Ministry/Agency and attached to the request. It should be noted that for technically complex projects, the concerned Government Ministry/Agency may (for the preparation of consultancy TOR) consider it appropriate to engage a consultant with related technical knowledge.

Guidelines for drafting the TOR for consulting services are given in Annex 1.

The finalisation of the TOR is to be carried out in consultation with EPPD, MOF. The role of EPPD in this regard would be two-fold:

- i) Ensure that the TOR has been prepared in line with national and sectoral objectives and priorities; and
- ii) Ensure that the TOR does not contain elements of conflict of interest.

2.6.2 Standardised PPP Documentation

In order to streamline and standardise PPP documentation, formats for Project Concept Notes, Project Pre-appraisals, Project Proposals, and Project Progress Reports have been approved by the CDC. These formats are given in Annex 3, 4, 6 and 9 respectively.

It should be noted that with each CDC submission, EPPD will prepare the Project Memorandum (Annex 11) while BFPD will prepare the Costing Memorandum (Annex 10). Each Memorandum will provide a brief executive summary of the critical issues, and an evaluation of the submission submitted by Government Ministries/Agencies for the CDC's consideration.

With the application of these formats and the Manual, there will be a common focus, understanding, and approach to PPP throughout the Government.

2.7 The Logical Framework¹³

Under this heading is introduced the concept of the logical framework as a dynamic planning tool applicable to all phases of the project cycle.

2.7.1 Introduction

The logical framework is a planning tool which was developed in the 1970s. As a planning tool, the logical framework has increasingly been adopted by major development agencies. Many development partners today have made the adoption of the logical framework mandatory for the approval of aid funding projects.

The driving force behind the design and development of the logical framework has been the experience made by development agencies that many aid funded projects have failed to reach the objectives and targets set out at the inception and formulation stages. Furthermore, many development agencies have found it difficult (in the process of implementing projects), to learn from past experiences in order to perform better in the future. Agencies have thus felt a need to develop a framework which approaches PPP in a more logical and structured manner, and which allows revisions of a project as it proceeds through the various phases of the project cycle. The logical framework does not replace the need to prepare project papers and documentation of each phase of the project cycle. Rather, it provides a more focused and logical approach to PPP for the purpose of improving the quality of the documentation and strengthening the focus of implementing the various project phases.

The application of the logical framework requires the project to be broken down into its core components with particular attention given to the assumptions and the indicators which will determine the success or failure of the project meeting its objectives.

2.7.2 Adoption of the Logical Framework

Concepts used in the Logical Framework

The purpose of formulating and implementing development projects is to induce changes and results which are desired within the project environment and society at large. It is assumed that there is general agreement as to the anticipated and improved situation at the stage when project planning takes place. This will make it possible to agree upon the (overall) goal of the project.

Development projects do not exist in a social vacuum. It is important that the desired future situation is described in such a way that it is possible to check at a later stage to what extent the project has been successful, in relation to the achievement of its objectives and the target groups.

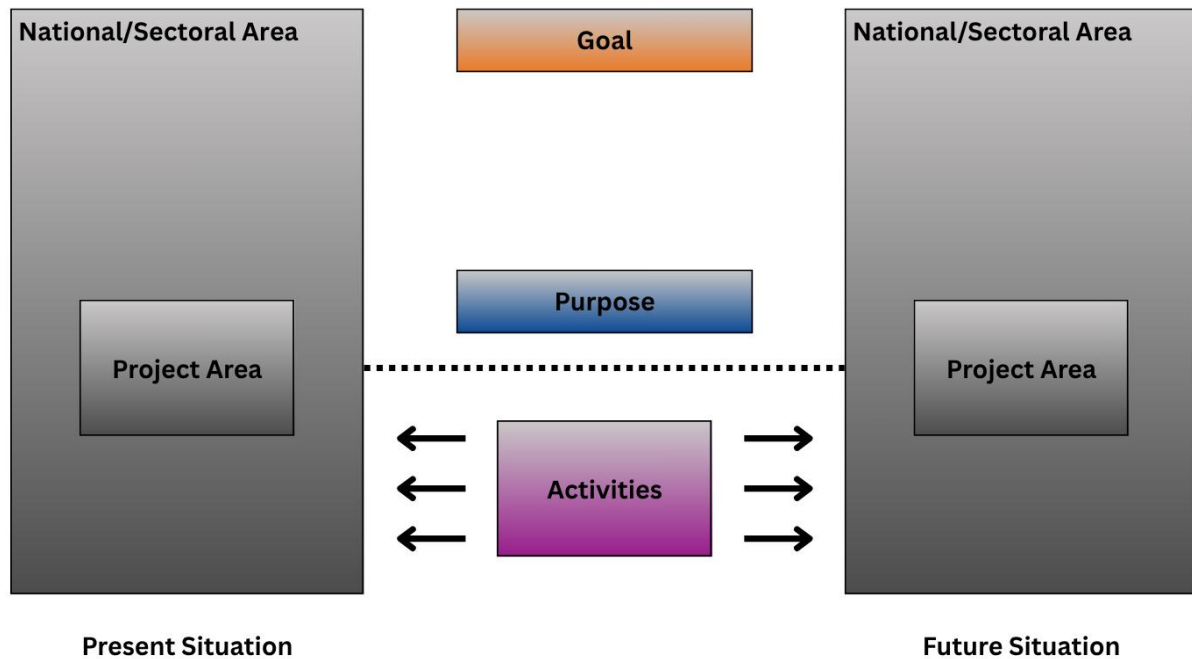
A development project is based on its input of resources, and the implementation of certain activities which will result in a number of outputs. The outputs are expected to contribute to the desired outcomes or goals. Inputs, activities and outputs are elements of a project, but they are not in themselves a measure of success or failure.

¹³ The Logical Framework is also referred to as Goal and/or Objective Project Planning

The success of a project depends upon a number of factors which can be controlled by the project management as well as a number of external assumptions. During planning and implementation, it is important to identify, monitor, and analyse external assumptions as they may cause the project to fail even if the project is implemented as planned.

Figure 2.6 illustrates schematically the concepts used in the logical framework.

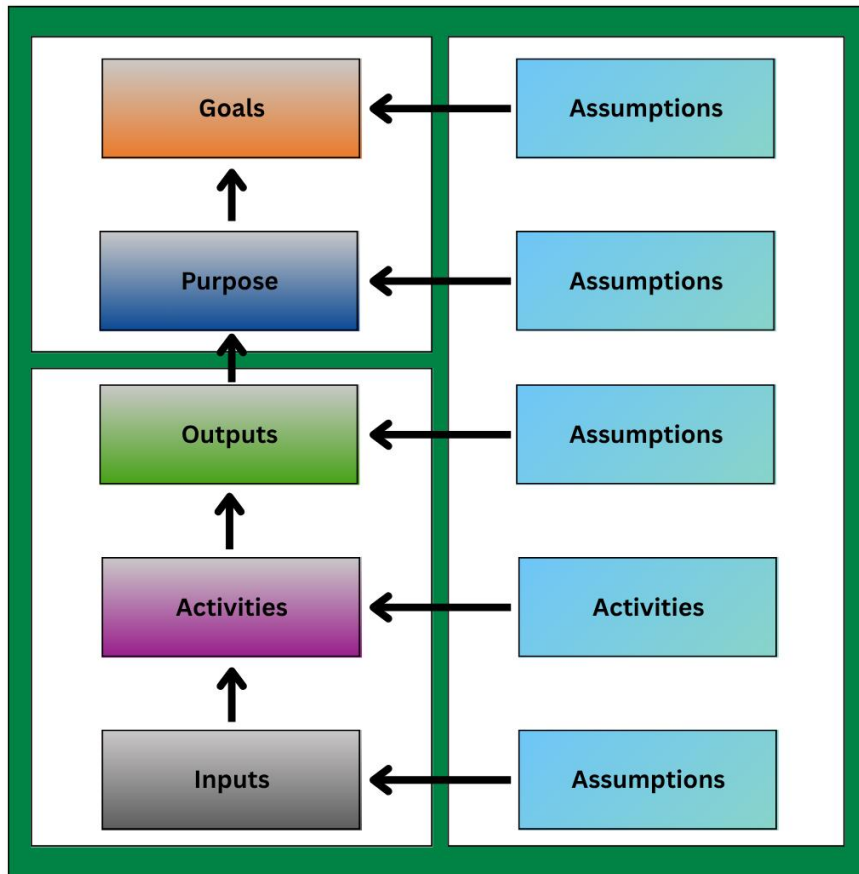
Figure 2.6: Concepts in the Logical Framework



The Development Process

In the logical framework a development project is seen as a causally linked sequence of events. These are described at the levels mentioned above: inputs, activities, outputs, purpose and goal. As it is not certain that these events will actually happen, the process is regarded as a sequence of development hypothesis which can be analysed and described as illustrated in Figure 2.7.

Figure 2.7: The Development Process



It is assumed that:

- If the inputs are available, then the activities will take place.
- If the activities take place, then the outputs will be produced.
- If the outputs are produced, then the purpose will be achieved.
- In the long run, this will contribute to the fulfilment of the goal.

While the certainty of the earlier hypothesis may be high as the results are largely under the management of the project, it diminishes at the higher levels.

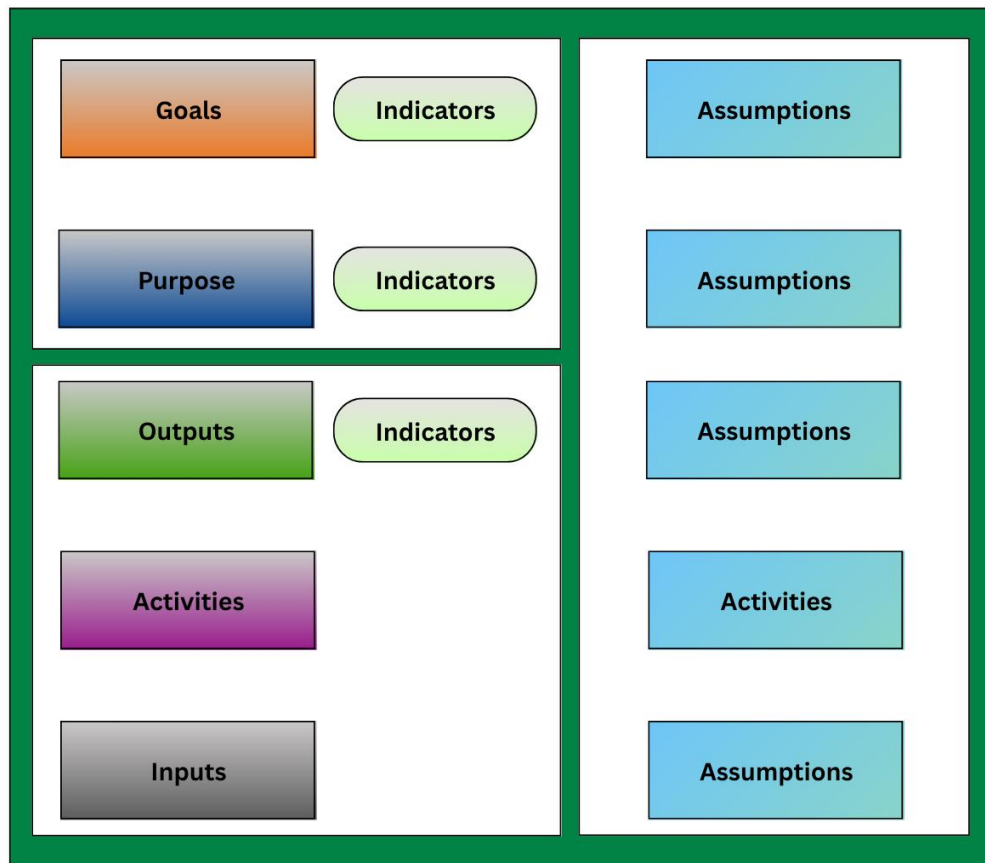
The uncertainties of the process are exposed as assumptions at each level. These are outside the direct control of the project but have to be fulfilled for the development process to succeed.

The development process is summarised in a matrix, the Project Matrix (PMatrix) as shown in Figure 2.9.

The Elements of the Project Matrix

An Actual PMatrix may contain elements additional to those on the previous page. Usually, a column expressing the project indicators, or the project success criteria is added as a measure of the project reaching its development objective, the purpose, and the outputs. The indicators specify how the achievements of objectives should be measured. This is illustrated in Figure 2.8.

Figure 2.8: Relationship between Indicators, Project Goals, Purpose and Outputs



A further Illustration of how the achievements of the objectives should be measured is given in Figure 2.9.

Figure 2.9: Description of Each Element in the Project Matrix.

Date of Preparing the Project Matrix:				
Project Title:				
Project Description:				
	Project Structure	Indicators of Achievements	How Indicators can be Quantified/Assessed	Key Assumptions
National or Sector Objectives	National or Sectoral constraints which the project is designed to overcome.	Quantitative measures or qualitative means of assessing if these objectives will be achieved.	Existing information sources or new sources which can be assessed or provided in a cost-effective manner.	External conditions necessary for the objectives to contribute to the national/sectoral objectives. Risks considered. Conditions attached to funding availability.
Project Purpose	Intended immediate effects on project area or target group. Expected benefits (or non-benefits) and beneficiaries. Other changes resulting from the project such as environmental, social, cultural.	Quantitative measures including internal rate of return or cost-effectiveness indicators. Qualitative assessment of achievements and distribution of effects and benefits.	Information sources which already exist or can be provided in a cost-effective manner. Specific provisions for collection of required information as part of the inputs and outputs, impacts assessments, surveys.	Externalities and other factors outside the control of the project which can affects the progress. Outputs to the achievement of the Objectives. Risks Conditions attached to the funding availability.
Results	Outputs (nature, quantity, quality and timing) to be produced by the project to achieve the immediate objectives.	Quantitative measures e.g. kilometers of roads built, classrooms constructed, areas planted. Local staff and counterparts trained.	Information sourced which already exist or can be provided in a cost-effective manner. Specific provisions for collection of required information, surveys, impact assessments, project, monitoring reports.	External factors critical to achieving timing of expected outputs, timely availability of inputs, output demand conditions. Risks. Conditions attached to

				funding availability.
Activities	Financial resources, materials and equipment, utilities and services. Personnel. Provision on time and in required quantity and quality.	Quantitative measures e.g. expenditure records, delivery according to project schedule. Training programmes.	Existing information sources. Project implementation and progress reports.	Decisions and actions outside the control of the immediate project managers e.g. policy measures, externalities. Risks. Conditions attached to the funding availability.
Preconditions Description of Preconditions				

As shown, the PMatrix illustrates the most important aspects of the project and the relationship between the activities and the outputs in a logical format.

It is important to note that the initial formulation of a project in a logical framework is only for the first step in the logical framework process. As the project proceeds through the project cycle, it is essential that the logical framework is periodically revised with a focus on the project reaching its objective(s) in a sustainable manner. The reason for this is that as the project proceeds through the project cycle, there is a general enhanced and improved understanding of the nature of the problem to be solved for the project to reach its objective(s) and goal.

Furthermore, with the passage of time the project environment and the assumptions laid down initially may change. This ongoing revision of the project may therefore lead to adjustments being made to the project purpose, the project outputs, and the project activities. The logical framework should not be considered a static tool carried out at the inception of a project, but a dynamic tool applied to each phase of the project cycle to assist the stakeholders in reaching the ultimate objective(s) and goal of the project in a sustainable manner.

Benefits from the Adoption of the Logical Framework

The benefits from introducing and applying the logical framework can be summarised as follows:

- i. As donor funding is increasingly conditioned to projects being presented (and processed) in logical frameworks, it will allow the Government to identify and formulate projects in a logical framework before the potential donor is approached (i.e.) the Government will be a more alert and capable partner in finalising the initial logical framework. Furthermore, it will allow Government officials to take the lead in revising the logical framework as a project proceeds through the project cycle. It is expected that this will strengthen the confidence of the donor community with regards to the Government's capability to be in charge of its own development which eventually will reduce the effect of donor driven aid.

- ii. The logical framework will assist Government officials to focus their thinking towards the solving of development issues in a logical sequence. It helps to ensure that fundamental questions are asked, and weaknesses are analysed, in order to provide decision-makers with better and more relevant information.
- iii. It guides systematic and logical analysis of the inter-related key elements which constitute a well-designed project.
- iv. It improves planning by highlighting links between project elements and external factors.
- v. It provides a better basis for systematic monitoring and analysis of the effects of projects.
- vi. It facilitates common understanding and better communication between decision-makers, managers, and other parties involved in the project.
- vii. Management and administration benefit from standardised procedures for collecting and assessing information.
- viii. Its use and systematic monitoring ensure continuity of approach when original project staff are replaced.
- ix. As more institutions adopt the concept, it may facilitate communication between Governments and donor agencies.
- x. Widespread use of the logical framework makes it easier to undertake both sectoral studies and comparative studies in general.
- xi. Applied as a dynamic tool, it will provide the stakeholders with a more focused and logical approach through the project cycle and eventually reach the project objective(s) and outputs in a resource-effective manner.
- xii. Although the scope of introducing the logical framework in this paper is limited to PPP, it should be noted that the logical framework concept has a very wide application. In fact, there are no limitations to the application of the concept as the logical framework is a problem-solving approach which can be applied to all problem-solving initiatives.

Limitations of Introducing the Logical Framework

The limitations of introducing the logical framework can be summarized as follows:

- i. The success of introducing the logical framework will depend on the sincerity and the know-how as well as the organisational skills, of the working group and the stakeholders in charge of the logical framework process (i.e.) if the approach is applied half-heartedly, misconceived, or if the criteria are badly chosen, the logical framework will reveal contradictions and become counterproductive. The introduction and application of the logical framework as a dynamic planning tool requires a high degree of discipline and systematic approach as well as a completely new way of thinking.
- ii. The use of the logical framework as an administrative requirement should be prevented and discouraged.
- iii. Rigidity in project administration may arise when objectives and external factors specified at the outset are over-emphasised. This can be avoided by regular project reviews where the key elements can be re-evaluated and adjusted.
- iv. It is a general analytic tool and as such it is policy-neutral on such questions as income distribution, employment opportunities, access to resources, local participation, cost and feasibility of strategies, and technology or effects on the environment.

- v. It is therefore only one of several tools to be used during project preparations, implementation, and evaluation, and it does not replace target-group analysis, cost-benefit analysis, time planning, impact analysis, etc.
- vi. The full benefits of utilising the concept can be achieved only through systematic training of all parties involved and methodological as follow-up.

Using the Logical Framework

The logical framework is a very powerful and dynamic planning tool. It should be used not only during initial planning of project formulation but also used as a management tool during project implementation.

As a tool applied to each phase of the project cycle, the logical framework is a participatory approach as it encourages the involvement of all stakeholders. As such, the process should be carried out in a multidisciplinary environment and include the main stakeholders in the constraints/problems solving initiative. Members of the logical framework team may not necessarily be familiar with the logical framework concept, but it is essential that the team is led by a logical framework facilitator who can organise the logical framework thinking and provide guidance throughout the process. It may be an advantage that the facilitator is not familiar with the details of the topic area.

In Appendix 1 is given a step-by-step approach in the application of the logical framework in which the PMatrix is the end result of the logical planning process.

The PMatrix should then be used as a starting point for formulating the technical part of the project and the detailed plan of operations. As such, it will serve as a major point of reference throughout the life of the project, particularly for implementation, monitoring, and evaluation of the project.

Public Sector Investment Programme (PSIP)

(Timeframe)

The structure (Table of Contents) of the PSIP in a three-year perspective, the responsible parties involved, and the closing date for the submission of the responsible parties' inputs are outlined below.

Input Description	Responsible Entity
Table of Contents	EPPD <i>Will be responsible for the overall co-ordination of the inputs outlined below for the draft version to be considered/approved by CDC in June and the final publication of the PSIP by 1 July.</i>
1. Sectoral Priorities <i>A brief outline on Government sectoral development, policies and priorities in a 3-year perspective and how it relates to public sector investments. The outline is to be based on relevant references in the PDS.</i>	EPPD to prepare the outline <i>By 1 May</i>
2. Scale of Public Investments <i>A brief outline on Government policy and strategy regarding public sector investment in a 3-year perspective. The outline to be based on the PDS and the sectoral priorities.</i>	EPPD to prepare the outline <i>By 1 May</i>
3. Methodology for PSIP Preparation. <i>A brief outline of the methodology adopted for the preparation of the PSIP with particular reference to the approach adopted for prioritisation and scheduling of investment projects.</i>	EPPD to prepare the outline <i>By 1 May</i>
4. Assessment of the Current PSIP <i>A brief assessment of the implementation performance of ongoing projects and the rate of bringing the pipeline of projects to the status of project implementation.</i>	EPPD to prepare the outline <i>By 1 May</i>
5. Public Sector Investment Programme 5.1. Ongoing Projects <ul style="list-style-type: none"> Capital investment projects Technical assistance projects Human resource development projects 	EPPD to request Government Ministries/Agencies <i>by 1 November¹⁴ to submit their related Project Progress Reports by 1 February</i>

¹⁴ Current budget year

<p><i>A brief outline on ongoing projects including their scheduling and General statement whether funds through the budget is available for project completion highlighting any problems which may require external assistance when the ongoing projects have been commissioned (i.e.) when projects are in their operational phase.</i></p>	<p><i>EPPD to prepare the outline by 1 April</i></p>
<p>5.2. New Project Proposals</p> <ul style="list-style-type: none"> • Capital investment projects • Technical assistance projects • Human resource development projects <p><i>A brief outline of new proposed projects at the following stages:</i></p> <ul style="list-style-type: none"> • EPPD pre-appraised projects/ appraised projects • EPPD appraised/CDC approved projects summarised in a Pipeline of Projects including their proposed scheduling. 	<p>EPPD to request Line Departments/Agencies <i>by 1 November¹⁵ to submit their related PCNs and a summary report CDC approved project (as shown opposite) by 1 February</i></p> <p>EPPD to prepare its submission <i>By 1 May</i></p>
<p>6. Source of Funds</p> <p>6.1. Ongoing Projects <i>A brief description on the funding of ongoing projects.</i></p> <p>6.2. New Project Proposals <i>A brief outline on Government's general strategy for the funding of new project proposals for implementation.</i></p> <p><i>General remarks, particularly in terms of the implementation strategy covers aspects such as:</i></p> <ul style="list-style-type: none"> • The funding of ongoing projects • The funding of new project proposals • Debt burden • The institutional structure to implement • The physical capacity to implement 	<p>EPPD to submit its description <i>By 1 April</i></p> <p>EPPD to prepare it submission <i>By 1 April</i></p> <p>EPPD to submit the draft PSIP to CDC for endorsement by 1 May</p>

¹⁵ Current budget year

Format for Consultancy Terms of Reference

1. Introduction

- Explain the reason for carrying out the study/consultancy assignment
- What is the nature of the assignment?

2. Objectives of the Study

- Details of the key objectives of the assignment why is the consultancy required
- Quantify the nature of the outputs and recommendations expected e.g. detailed feasibility study with economic/financial returns, technical designs and specifications, considerations on issues such as environment, natural disasters risks, climatic, gender, social, draft legislation, institutional framework, operational manual, etc.

3. Background to the Project, Sector or issue

- Short history of the sector and the issues to be studied
- Current situation affecting the sector/issues

4. Issues to be Studied

- An outline of the main issues to be studied (this is the central part of the TOR as it sets out what the consultant is expected to do)
- The Consultant should be encouraged to elaborate on additional important items as they may arise during the course of the study

5. Plan of Work

- The methodology and the approach of work could be outlined although this is normally the duty of the Consultant to elaborate on his/her proposed approach to complete the assignment. This would provide guidance to negotiate the final methodology on how the Consultant should proceed with the work.
- The same approach should be applied to field studies or surveys required.
- The work relationship with counterpart staff.

6. Expertise required

- The range of consultancy skills required should be outlined

7. Reporting

- Responsible agency for guiding study and monitoring progress (Project Coordinating Committee)
- Time frame for the study, reports and other supporting documentation to be produced
- Reference made to relevant reports and formats given in Manual on PPP

8. Conflict of Interest

- Possible conflict of interest to be elaborated upon as appropriate

Format for Terms of Reference (TOR) for a Full-Scale Environmental Assessment

The format is considered as a guideline only. The structure and content of the final TOR to be adjusted to related EA

1. Project

Project title

2. Introduction

State the purpose of the EA and the contents of the TOR, describe the development project to be addressed and explain the arrangements for the EA.

3. Background

Provide the following background documentation:

- A brief description of the major components of the proposed project. A statement of the objectives it is intended to meet
- The Executing Agency
- A brief history of the project (including alternatives considered) and its current status and timetable
- Identification of any associated projects, or projects in progress or planned, within the region which may compete for the same resources.

4. Objective(s)

The objective of the EA is to identify possible environmental impacts of the proposed project and to collect baseline information for future monitoring and evaluation of project activities

5. Organisation of Study

Identify the organisational structure for the EA.

- Who is to undertake the study
- Who is to be consulted
- Who is to review the recommendations from the study

6. Environmental Assessment Requirements

According to the Lands, Survey and Environment Act of 1989, all major projects must be classified with respect to their possible environmental impact. This “project” has been classified as having significant potential environmental impact and should therefore undergo a full environmental assessment. The EA should be prepared in accordance with the procedures for carrying out Environmental Impact Assessments and be structured in such a way that it addresses both the environmental impact, mitigating measures and economic consequences of each of the identified overall issues.

7. The Consulting Team

The Team could consist of:

- An environmental consultant/Team leader responsible for the EA report
- A natural resource management specialist
- A resource economist

- A sociologist/socio-anthropologist

8. Schedule

The team is expected to use up to () weeks to prepare the field work, collect necessary documentation and present as well as discuss envisaged activities with the Review Board. The fieldwork shall be implemented during a period of () weeks.

The Team will have a period of () total weeks for the preparation of the report. *See item 14.*

9. Study Area

Describe the study area

10. Scope of the EA Study

The EA study should cover, as a minimum, the following environmental issues:

- Potential sources of impact from environmentally significant project components
 - i. Project inputs
 - ii. Project activities
 - iii. Project outputs
- Potential sufferers of impact
- Potential environmental impacts
 - i. Potential impacts
 - ii. Significant impacts
 - iii. Potential mitigating measures

11. Undertaking the EA Study

i. Description of the proposed project

Describe in general terms the components of the project which are likely to give rise to environmental concerns.

Encompass, as a minimum, the project inputs, and outputs identified in Item 10.

Include a description of the following project factors:

- Purpose
- Location
- General lay-out
- Size
- Capacity

ii. Description of the targeted environment

Describe the surroundings of the project and the environmental baseline conditions (e.g. existing pollution and/or especially sensitive areas) against which the future impacts can be assessed, include changes anticipated before the project commences.

Encompass, as a minimum, the issues identified in item 10 ii)

iii. Potential impacts of the proposed project

Distinguish between significant positive and negative, direct and indirect, (primary and secondary) and intermediate and long-term impacts. Also identify those that are unavoidable or irreversible.

Where possible, describe impacts quantitatively and assign economic values to the environment damage.

Characterise the extent and quality of available data, explaining significant information deficiencies and any uncertainties associated with predictions of impacts.

Identify the need for e.g. survey, data collection.

Encompass those potential impacts identified in 10 iii).

iv. Significant Impacts

Evaluate the significance of impacts with regards to the relevant environmental regulations, standards and human values governing environmental quality, health, safety and welfare of those likely to be affected, protected areas, protected species, land-use control, etc. at international, national, regional and local level, and with regards to conflicts of interest with existing development. Incorporate, as a minimum, the considerations identified in TOR 10 iv)

v. Project alternatives

Describe alternatives that were examined while developing the proposed project and identify other alternatives which could achieve the same objectives.

When describing the impacts, indicate which are irreversible or unavoidable and which can be mitigated.

Where possible, quantify the costs and benefits of each alternative, incorporate the estimated costs of any associated mitigation measures.

Include the alternative of not undertaking the project to demonstrate the environmental conditions without it.

vi. Management plan to mitigate negative impacts

Undertake the following:

- recommend feasible and cost-effective measures to prevent or reduce significant negative impacts to acceptable levels
- estimate the impacts and cost of those measures, and of the institutional and training requirements necessary to implement them.
- consider compensation to affected parties for impacts which cannot be mitigated.
- prepare a management plan including proposed work programmes, budget estimates, schedules, staffing and training requirements and other necessary support services to implement the mitigation measure.
- incorporate, where appropriate, those measures identified in Section 10.

vii. Economic evaluation

Undertake an evaluation of the environmental impacts and proposed mitigation measures, with a view to one of the following:

- achieving specific environmental quality objectives at least cost
- analysing the optimum level of environmental damage reduction in relation to costs of mitigation
- evaluating the economic value of unavoidable environmental impacts so that such costs can be incorporated into the final economic appraisal.

12. Institutional Needs to Implement the Mitigation Measure

Review the authority and capability of institutions of local, provincial/regional and national level, and recommend steps to strengthen or expand them so that the management and monitoring plans in the environmental assessment can be implemented.

13. Environmental Monitoring

Develop a detailed plan to monitor the implementation of mitigation measures and the impacts of the project during construction and operation. Include in the plan an estimate of the capital and operation costs and a description of other inputs, such as training and institutional strengthening, needed to carry it out.

14. Inter-Agency and NCO/Public Investment

Demonstrate the extent to which inter-agency and NGO/public views were consulted, for example:

- Government led authority
- Ministry of Natural Resources and Environment
- other relevant government agencies
- donor agency/agencies
- national and/or local NGO's representing environmental and community concerns
- the affected population

15. Report Structure

The report should be concise and limited to significant environmental issues. Organize the report as indicated below:

- Non-technical executive summary presenting recommended management, mitigation and monitoring measures envisaged to avoid, reduce or remedy significant adverse environmental effects, and unavoidable adverse environmental effects.
- description of the project comprising information on its purpose, site, design and size.
- summary of environmentally significant project components encompassing a description of the impact.
- receivers and principal environmental impacts and their magnitudes.
- summary of the environmental significance of unavoidable adverse impacts and of introducing the recommended management and mitigating measures.
- presentation, based on several alternatives, of the most favoured option for reducing potentially adverse environmental impacts. The institutional, managerial, technical and financial consequences should be stated, including monitoring or other requirements.
- the preliminary Draft Conclusions and Recommendations” of the Team, to be discussed with the Review Panel.
- A preliminary Draft Environmental Assessment Report, written in English, shall be presented to the Review Panel no later than three weeks after the field work has been completed. Within two weeks, after receiving the comments of the Review Panel, a Draft Report to be submitted in 15 hard copies.
- Upon receipt of comments from the Review Panel, a final Environmental Assessment Report (25 copies) shall be submitted within two weeks.

16. Background Documents

Background documents currently available.

17. Signature of Chairman of the Environment Board

18. Date of Report Submission

Chapter 3

Project Identification

3.0 Executive Summary

The aim of the project identification is for Government Ministries/Agencies to identify project ideas on the basis of their related Sector Plan, as an aid to reach their development objectives through the implementation of the related project ideas.

Moreover, the identification of sound project ideas will assist the Government in developing the annual Public Sector Investment Programme (PSIP) consisting of the Pipeline of Projects and Ongoing Projects. This will facilitate the application of an organised approach in Government's efforts to negotiate project implementation funding requirements, provide a mechanism of forward planning of Government financial resources, and the coordinated use of scarce domestic resources for the Government to reach its development objectives and priorities.

The main steps in Project Identification and the further related steps in Project Planning and Programming can be summarised as follows:

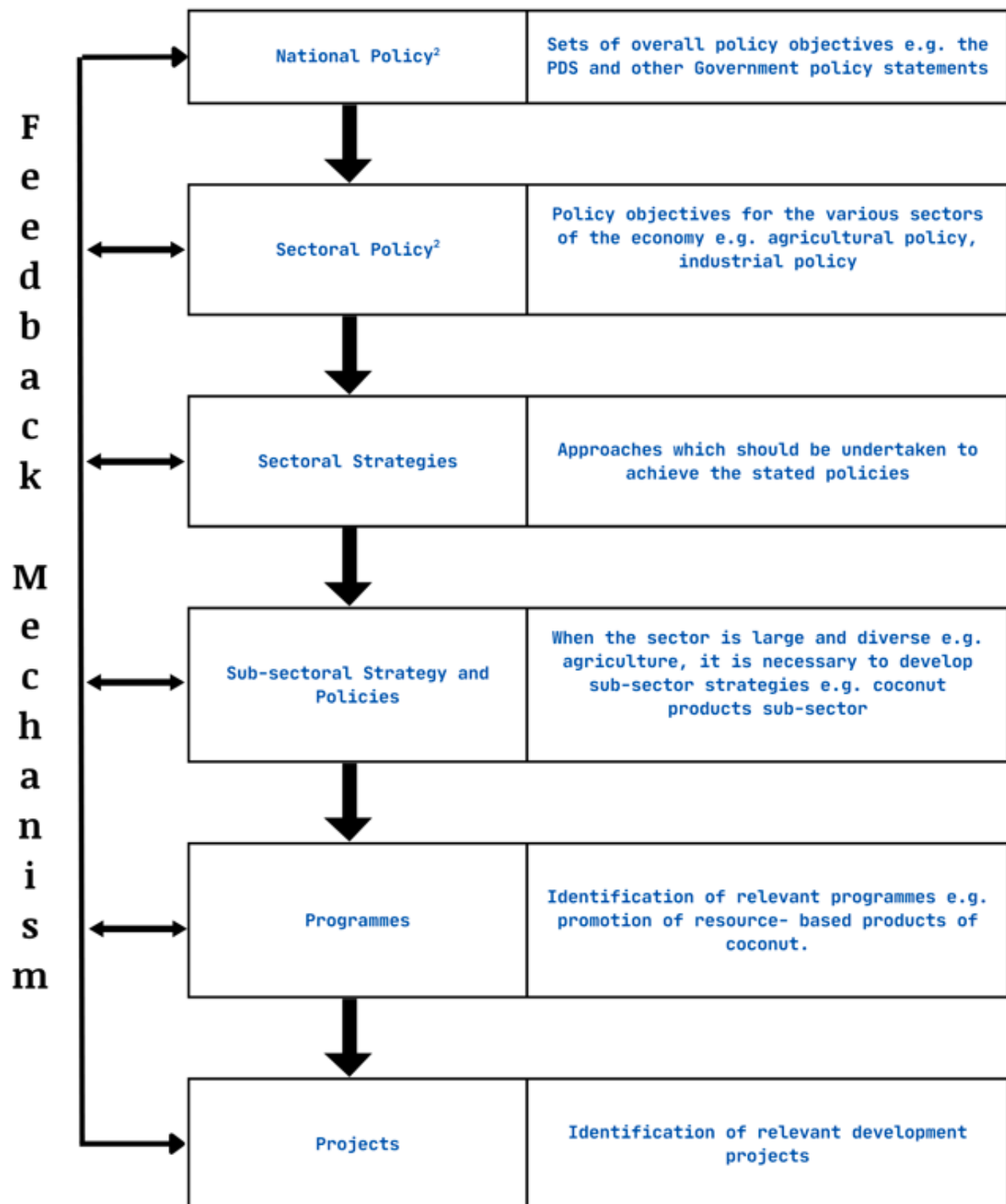
- Preparation of a Sector Plan for the related sector (i.e.) the preparation of policies and strategies for the sector to reach its development objective(s).
- Identify new development programmes and projects for implementation which would, inter alia, facilitate the sector to reach its development objective(s).
- Identify programmes and projects to be translated into Project Concept Notes (PCNs).
- PCNs to be pre-appraised by the Economic Planning and Policy Division (EPPD) for all programmes and projects irrespective of project costs.
 - Favourably pre-appraised PCNs (less than or equal to \$200,000 tala) are fast-tracked to the Planning and Budget Committee (PBC, MOF) to solicit funding.
 - Favourably pre-appraised PCNs above \$200,000 tala but less than \$500,000 tala are referred to Sector Advisory Committees (SAC) for their consideration.
 - Favourably pre-appraised PCNs above or equal to \$500,000 tala are submitted to CDC for consideration and endorsement and will serve as the main inputs for updating the Public Sector Investment Programme (PSIP for pipeline of projects).

The institutional responsibility for PCN rests with the concerned Government Ministry/Agency.

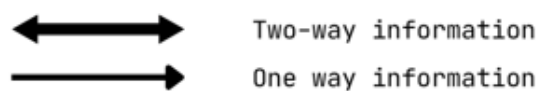
3.1 General

It is important that development projects are identified based on established national and sectoral policies, strategies and programmes. Figure 3.1 visualises the project process.

Figure 3.1: Relationship between National Policy, Sectoral Policy, Sectoral Strategy, Programmes and Projects



Legend:



The following characteristics can be noted from Figure 3.1:

- Clearly defined sectoral policies and strategies are essential components for the identification of better and more relevant projects. It is often very difficult to justify a project in the absence of an overall sectoral or sub-sectoral plan or even master plans, (i.e.) electricity generation and distribution, international and domestic airport developments, developments of seaports, roads and bridges developments, water supply and sanitation developments, etc.
- The planning process is not a one-way process. In most cases, policies influence the formulation of strategies, which in turn translate into programmes and projects. It is important to design feedback mechanisms to allow for policies to be reviewed and, if necessary, changed. Experiences are gained from the detailed project planning and implementation process.

Planning is thus a dynamic process both influencing and responding to changing circumstances and events.

The basic documents for the identification of projects in Samoa are the following:

- National Development Plan (Pathway for the Development of Samoa (PDS));
- Government policy statements;
- Sector Plans including Master Plans for utilities developments; and
- Corporate Plans of Ministries/Agencies.

The National Development Plan is a strategic document which provides planners with a vision and guidelines on macroeconomic development in Samoa in the short and medium term. The document, covering periods of at least five (5) years, is reviewed on a mid-term and end-of-term basis, and is prepared by the EPPD, MOF in close co-operation with related Government ministries/agencies, sector coordination units, and the private sector. The National Development Plan (PDS) is approved by Cabinet.

In the above perspective, the PDS and the Government policy statements provide the basic guidelines for the related Government Ministries/Agencies to formulate their Sector Plans. Corporate Plans recognise the contribution of the various other plans to the mandate and responsibility of the concerned Government Ministry/Agency. These will eventually form the basis for Government Ministries/Agencies to identify new development programmes and projects for implementation. The screening and selection of priority programmes and projects occurs in joint co-operation between the EPPD and the concerned Government Ministries/Agencies.

3.2 Project Identification

The task of identifying suitable projects is the most important and crucial step in the whole process of project preparation. This is the responsibility of Government Ministries/Agencies. The basis for the Government Ministries/Agencies to identify projects is the outcome of a detailed sector analysis of opportunities and constraints affecting the attainment of its objectives and goals. Supplementary to this analysis and within the framework of national and

sectoral objectives and strategies, project ideas may result from the analysis of the following issues:

- Identification of the market demand or needs not met, and the most effective means by which to meet them.
- Identification of problems or constraints in the development process due to shortage of essential facilities, services, skilled human resources, and other obstacles.
- Identification of unused or under-utilised material or human resources which can be converted to more productive use or conversely, over-utilised natural resources which need to be preserved and restored.
- Identification of the need to supplement or complete previous/earlier investments that have taken place.
- Identification of initiatives or opportunities associated with Government incentives, for local and joint-venture investments in productive enterprises or activities of local, private or public entrepreneurs who wish to take advantage of the opportunities they perceive.
- Identification of local political or social demands (e.g.) demands associated with economic growth that affect social or regional equalities.
- Identification of market potential through the review of statistical data and available surveys concerning:
 - Products for which Samoa has a comparative advantage
 - Products which could substitute for imported goods
 - Products required by a growing domestic market
 - Products for which there are export markets potentials
- Political and strategic consideration.

Project ideas which emerge through this process of project identification are statements of how a certain problem can be overcome or a particular objective can be achieved. Promising project ideas need to be refined further in an orderly manner and only the most suitable ones are retained for further investigation.

During the project identification stage, a number of projects are identified. Preliminary examination is conducted and only those ideas which are considered potentially viable are selected for further processing into the next stages in the project cycle (i.e.) pre-project appraisal, project formulation, and appraisal. In order to facilitate the preliminary screening of process, the concerned Government Ministry/Agency needs to translate the project idea into a PCN, which are short reports that describe the main elements of the project. The structure of the PCN is outlined in **Annex 3 of Chapter 2**.

3.3 Project Screening and Preliminary Approval

When a project idea has been formulated into a PCN, the PCN is submitted to the CDC Secretariat (EPPD), for a pre-appraisal of all PCNs irrespective of their total project costs.

Upon receipt of a PCN, EPPD will assess the following:

- That the project has a sound development orientation and approach in line with the national development plan, and other respective Government policy statements, etc.;
- That the identification of the project is in line and consistent with the related sector plans;
- That the fundamental assumptions relating to the project are valid;

- That adequately trained personnel will be available when the project is commissioned and enters into its operational phase;
- That the project is financially self-sustained or that the financial implications (as appropriate) can be accommodated through future budget allocations (i.e.) referred to Planning and Budget Committee, Ministry of Finance;
- That social and gender issues have been adequately addressed; and
- That the project is environmentally sound (risks - climate change, natural disaster, etc.) and is expected to have a sustainable future (anticipate the magnitude of cost of damages from disasters).

In Annex 3 and 4, the formats for the PCN and the PCN Pre-Appraisal Report (PCNPAR) are presented respectively and all pre-appraisals irrespective of the project costs are to be prepared by EPPD. It should be noted that EPPD's pre-appraisal is on the attractiveness of the concept of the proposed project and a pre-requisite for the concerned Government Ministry/Agency to proceed with project formulation.

For a project below or equal to a total cost of \$200,000 tala that is favourably pre-appraised by EPPD, it is referred to the PBC, MOF for their approval and to solicit funding. For a project funded from the local budget, it is channelled through the BFPD for local funding (capital costs and any other related initial development costs) and for annual recurrent costs once operational. For projects soliciting aid funding (grants), it is put through the ACMD while for projects financed through borrowing or loaning, it will be put through the DMD.

For a project that costs above \$200,000 tala but below \$500,000 tala, it is referred to the SAC for their guidance on whether the Government Ministry/Agency can develop it further into a full-fledged project proposal report.

For a project above or equal to a total cost of \$500,000 tala, it will be referred to the CDC for approval and will be submitted to the ACC for financing options.

The final EPPD screening and selection will be based on the appraisal of the Full Project Proposal (FPP) outlined in Chapter 5: Project Appraisal.

3.4 Public Sector Investment Programme

In addition to serving as a pre-requisite for the concerned Government Ministries/Agencies to proceed with project formulation, favourably pre-appraised PCNs also serve as the main input for:

- Preparation of Pipeline of Projects; and
- Preparation of Ongoing Projects.

The main purpose of preparing a Pipeline of Projects and Ongoing Projects is to provide updated information on the scope of the Government's future development programme. The Pipeline of Projects which also relates to Technical Assistance Projects/Human Resources Development Projects are important information in Government's negotiations with the donor community. The PSIP is an important document outlining the phasing of Government's capital investment programme in a three-year perspective for domestic funding allocations and Government's project capital funding negotiations with the donor community.

The preparation of the PSIP is outlined in further detail in **Chapter 2: Section 2.5**.

3.5 Institutional Responsibilities

The responsibility of project identification, including the preparation of documentation forming the basis of identifying and formulating new projects into PCNs, the pre-appraisal/appraisal, and the preparation of Pipeline of Projects/PSIP are as follows:

- i. EPPD is responsible for the preparation of the National Development Plan (i.e.) Pathway for the Development of Samoa.
- ii. Government Ministries/Agencies are responsible for leading and coordinating the preparation as well as formulating and monitoring of their respective Sector Plans.
- iii. Government Ministries/Agencies are responsible for project identification and the preparation of the related PCNs.
- iv. EPPD is responsible for the pre-appraisal of PCNs for all development projects irrespective of the total project costs.
- v. EPPD is responsible for the preparation and updating of the PSIP.

Government Ministry/Agency Use only

Annex 3

Project Concept Note for (*Project Name*)

The Project Concept Note (PCN) is to be prepared by the concerned Government Ministry/Agency which has identified the project idea. (the executing agency). The PCN should be prepared for each project idea (i.e.) 2-3-page report highlighting the constraints, the objectives, the compatibility to the national plan (PDS) and the related sectoral plan objectives and strategies and its sustainability, as well as to identify potential costs and benefits from the project idea. All completed PCNs by Government Ministries/Agencies are to be forwarded to the technical arm of the CDC Secretariat (EPPD) for their pre-appraisal prior to expediting its submission for a PCN with total cost of below \$200,000.00 tala to the BPC, MOF for project approval and subsequent soliciting of funding. A favourably pre-appraised PCN of total cost between \$200,000.00 tala and \$500,000.00 tala is to be submitted to the Sector Advisory Committee for their approval and for the subsequent development into a Project Proposal by the Government Ministry/Agency. A favourably pre-appraised PCN of more than \$500,000.00 to be submitted to the CDC for their endorsement and for the Government Ministry/Agency to develop it into a full-fledged Project Proposal.

1. Broad Sector(s)

Economic, Social, Infrastructure, Environment

2. Sector(s)

14 sectors as defined in the Sector Planning Manual

3. Project Objective(s)

State the objective(s) to be achieved through the implementation of the project.

4. Background

This section provides a brief scope of the proposed project and problems to be addressed. It also describes the development potential, the parties involved, issues, the beneficiaries and how the project relates to National Plan, the Government policy statements, and the sectoral objectives and strategies.

Description: *Provide a clear and concise summary of the project.*

a. Alignment to the National Plan

*From the National Plan (**Pathway for the Development of Samoa(PDS)**) and other relevant policies and plans list the relevant strategies and outcomes (with any relevant numbering). Explain how the project supports the chosen PDS Outcomes, especially the significant ones. For the PCN, the explanations can be brief, for the FPP they should be extended, and details clarified*

Alignment to the National Plan (PDS) - (MCA consideration to be considered - MoF)		
Key Strategic Outcome	Key Priority Area(s)	Discussion of Alignment

Alignment to the relevant Sector Plan(s)		
Sector(s)	Sector Outcome	Discussion of Alignment

- b. **Issue(s):** Conditions that have negative consequences for the project and that are not settled or are under discussion or disagreement.
- c. **Benefit(s):** The outcome of the project that is seen as a positive change by the stakeholder.

5. Stakeholders Consulted

6. Potential Donor

5 Financing

Please clarify whether the Sector Agency has identified funding for this project?

No?

Yes? (Clarify Below)

Government Budget	WST\$('000)
External Funding (Development Partner/Regional)	WST\$('000)

6 PCN Submitted by Head Line Ministry/ Implementing Government Agency (PCN Submitted By)

Please print Name and Designation:

Signature:

Date

7 CDC Secretariat Review

(Note: The signature will ensure that the form has met all the requirements of PCN application)

Date

8 Chief Executive Officer, Ministry of Finance (Executing Agency) - Clearance for submission to Sector Advisory Committee

Please print Name and Designation:

Date

Pre-Appraisal Report for a PCN for Project (Name)

The Pre-Appraisal Report to be prepared by EPPD on the basis of the PCN submitted by the Government Ministry/Agency irrespective of the total project cost. For a favourably pre-appraised project with total cost below \$200,000.00 tala, they are fast-tracked to the BPC, MOF for approval and subsequently expedited to solicit funding. A favourably pre-appraised PCN with a total project cost between \$200,000.00 tala and \$500,000.00 tala and a total project cost of more than \$500,000.00 are to be passed on to the Sector Advisory Committee (SAC) and the Cabinet Development Committee (CDC) respectively for approval and to develop these PCNs into full-fledged Project Proposals.

1. Broad Sector(s)

Economic, Social, Infrastructure and Environment

2. Sector(s)

Sector(s) relating to the project as defined in the Sector Planning Manual

3. Executing Agency

Government Ministry/Agency proposing project idea and concept

4. Project Objective(s)

State the objective(s) to be achieved through the implementation of the project.

5. Project Description and Strategy

Provide a clear and concise summary of the project.

a. Summary of Issues

This section provides a brief scope of the proposed project and problems to be addressed. It also describes the development potential, the parties involved, issues, the beneficiaries and how the project relates to National Plan, the Government policy statements, and the sectoral objectives and strategies.

b. Alignment to the National Plan and sector objectives and outcomes

From the Pathway for the Development of Samoa and other relevant sector policies and plans list the relevant strategies and outcomes (with any relevant numbering). Explain how the project supports the chosen PDS Outcomes, especially the significant ones and the link to sector objectives and outcomes. For the PCN, the explanations can be brief, for the FPP they should be extended, and details clarified.

c. Discussion of conditions that may potentially have negative consequences for the project and that are not settled or are under discussion or disagreement.

- i. Securing land at project location*
- ii. Social and gender issues (land compensation effected)*
- iii. Environmental issues/costs (Natural Disaster Risks, Climate Change implications, Drainage and Sewerage – flooding and water shortage, land erosion, etc.)*

6. Estimated Revenues and Project Costs

- a. Estimated Revenues and Project Cost(s): Revenue and Costs broken down to capital (local and foreign), recurrent revenues and recurrent costs.*

7. Tentative Financial/Economic Returns

Initial analysis on the project and the results interpreted.

8. Implementation Period

9. Consultations with other Stakeholders (Government ministries/agencies, private institutions or groups, etc)

10. Potential Donor

11. Pre-appraisal

Pre-appraisal covers the following aspects:

- *That the project has a sound development orientation in-line with national plan (PDS) and other Government policy statements;*
- *That the identification of the project is inline and is consistent with the related sector plan(s);*
- *The fundamental assumptions relating to the project are valid;*
- *That the project is financially self-contained or that the financial implications (as appropriate) can be accommodated through future budget allocations i.e. whether the project has been referred to the Budget and Planning Committee, Ministry of Finance or not and the related outcome;*
- *That gender issues have been addressed;*
- *That the project is environmentally friendly (after consultations with MNRE/MWTI);*
- *That qualified personnel is available or alternatively that appropriate personnel training has been provided for; and*
- *That the project is expected to have a sustainable future.*

12. Status

Favourably or not favourably pre-appraised by EPPD.

13. Ministry of Finance Comments

14. Recommendations

15. Date and Signature of Assistant Chief Executive Officer, Economic Policy and Planning Division

Project Formulation

4.0 Executive Summary

The aim of Project Formulation is to demonstrate the viability of a project in terms of the project being:

- Financially viable
- Economically viable
- Environmentally friendly
- Socially adaptable
- Politically acceptable

The instruments available to demonstrate the viability of a project are based on the two following optional approaches:

- If the costs and the benefits of a project can be measured in quantifiable terms, the viability of the project is to be assessed in terms of a cost-benefit analysis through the preparation of a feasibility study.

This is the generally acceptable tool for assessing the feasibility and viability of development projects.

- If the costs and the benefits of a project cannot be quantified in reliable terms – j which is the case for many projects in the health, education, and social welfare sectors – the alternative approach is to ensure that individual projects are as "cost-effective" as possible through the application of a cost-effectiveness approach.

The institutional responsibility for preparing the required project viability documentation and the preparation of the Project Proposal (Annex 6) rests with the concerned Government Ministry/Agency. As part of this submission, an environmental impact analysis should be attached as a separate document.

In case the concerned Government Ministry/Agency does not have the capability/capacity to prepare the required project viability documentation, a local or foreign consultant may be engaged as appropriate (reference is made to this in Section 4.4)

4.1 General

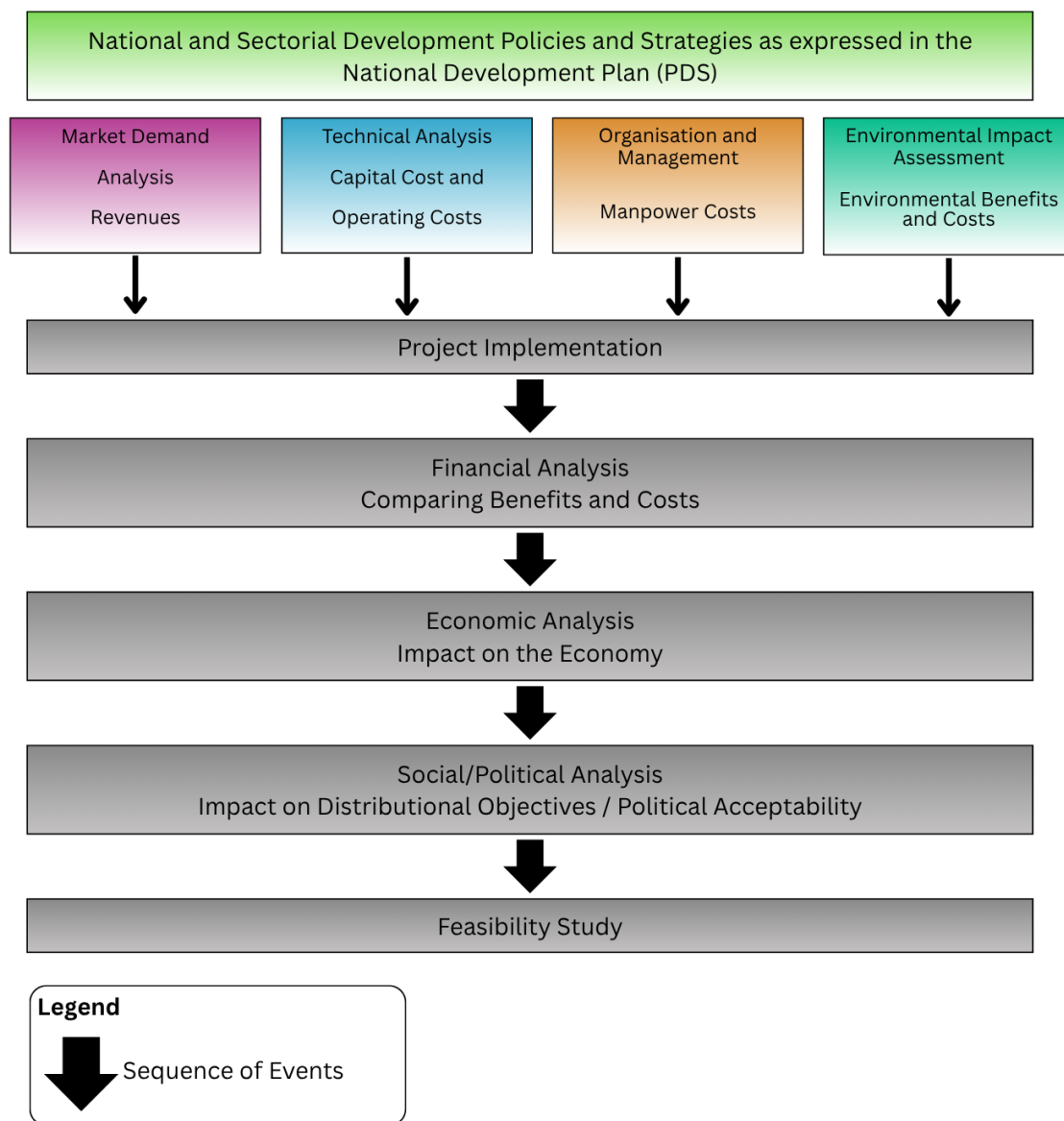
Once the related PCNs have been favourably pre-appraised by the EPPD and approved by the respective authorities (Chapter 3: Section 3.3), the related EPPD Pre-Appraisal Report is passed on to the concerned Government Ministry/Agency as a basis for the concerned Government Ministry/Agency to initiate project formulation.

The formulation of a project is normally based on the outcome of a feasibility study. This will be required to demonstrate the viability of a project when the project is in its operational phase (i.e.) when the project has been implemented and handed over to the operational entity. In this perspective the project should be:

- Financially viable
- Economically viable
- Environmentally friendly
- Socially adaptable
- Politically acceptable

The techniques and approaches adopted to analyse and formulate a project in meeting the above criteria, are summarised diagrammatically in Figure 4.1.

Figure 4.1: Techniques and Approaches Adapted for the Preparation of a Feasibility Study



4.2 Cost-Benefit versus Cost-Effectiveness

Application of a cost-benefit analysis is the generally acceptable tool for assessing the feasibility and viability of development projects. The cost-benefit analysis examines the financial and economic costs of project proposals (Annex 5; Section 6 and Section 7). From this analysis, the net present value (NPV) and/or the internal rate of return (IRR) (Annex 5; Section 6.10) can be calculated for both the financial and the economic net cash flows of projects. Such analysis requires reliable data for both the costs and benefits so that they can be translated into cash flow terms for both the financial and the economic aspects of the analysis. This is, however, not always easy as it may be difficult to quantify the financial/economic benefits in many projects. This is most commonly the case for projects in the health, education, and social welfare sectors. It is also true in many infrastructure projects. As a consequence, the conclusions of applying the cost-benefit analysis to these projects may be biased by the subjective or arbitrary nature of the assumptions used. In other projects, while benefits may be quantifiable, the data used in the analysis may not be accurate and reliable. This can result in investment decisions being made based on misleading information.

In situations where it proves unreliable to carry out a cost-benefit analysis, the next alternative is to attempt to ensure that individual projects are as "cost-effective" as possible. This approach is based on the simple principle that development projects achieve their designated objectives at the least possible cost in capital and/or recurrent terms with particular attention paid to the assessment of cost-effectiveness.

This is not to say that a cost-benefit analysis does not seek the most cost-effective technical solution. It only implies that when benefits cannot be quantified in reliable terms, the application of the cost-effectiveness analysis may be the most appropriate approach as a basis for a sound investment decision. In view of the above outline, it is important to note that the cost-effectiveness analysis can only provide a comparative assessment between projects aimed at achieving similar objectives or outputs. The analysis cannot make a choice between projects (i.e.) between investing in a clinic, a school, a road, or a wharf. Apart from providing a sound basis for an investment decision, the cost-benefit analysis can provide the basis for this choice and ranking of projects.

In the subsequent project formulation, the cost-benefit analysis approach will be used as the basis for investment decisions. With reference to the above discussion and as an alternative approach to cost-benefit analysis as a basis for investment decisions, the cost-effectiveness analysis is outlined in further details in Annex 5.

4.3 Formulation of the Feasibility Study

In formulating a project there are certain items of information which are common for all projects (e.g.) the macro-economic situation, national policies, and strategies as expressed in the PDS. This combination of common background information and sector-specific details, allows for the adoption of a standard approach to these aspects at the start of project formulation. Aspects relating to project specifics such as products demand analysis, choice of technology, organisation and management, environmental analysis etc. will be dealt with separately as outlined in Annex 5.

Market analysis addresses the scope of the demand for the proposed product outputs and would provide estimates of the revenues derived from the outputs of the project. Technical analysis and the choice of technology would provide the physical requirements (site, machinery, buildings, construction works, etc.). This will provide the basis to estimate the required costs to implement the project (capital costs) and the recurrent costs (including working capital) required to operate the project in its operational mode. Complementary to this information, there will be a detailed outline of the organisation structure and the management of the project when the project has been implemented and handed over to the responsible operating entity.

The next step would be to measure how the net benefits (revenues less production costs) of the project relate to the capital cost requirements (i.e.) to establish a measurement of the efficiency of the proposed investment and of the use of the proposed resources. This is the purpose of the financial analysis. It should be noted that the financial analysis reflects the market value of the benefits and the costs (i.e.) it is a measure of the financial efficiency of the proposed investment and the use of resources. In an economic system with possible distortions in market prices, the financial analysis does not necessarily reflect the economic impact of the project to the economy as a whole. Considering the use of capital, land, labour, etc. as scarce resources in an economic sense, the economic analysis would – through the application of "shadow prices" – help to determine whether the proposed resources are being "best used" in the selected project.

As outlined in the previous Section 4.2, the concepts of the Net Present Value (NPV) and/or the Internal Rate of Return (IRR) are normally adopted as indicators in the cost-benefit analysis to measure the efficiency of investments and the use of resources, both in a financial and in an economic sense¹⁶.

As a separate issue there is also a need to assess the negative/positive effects a project may have on the environment. If the negative effects outweigh the positive effects in terms of air/water pollution, land erosion, depletion of fish stocks, etc., it will not only incur additional costs for any corrective actions but also result in a negative impact on the quality of life of the affected population. Environmental impact assessment studies are essential inputs in the cost/benefit analysis of the project if the long-term environmental cost implications can be quantified. If the costs of the possible environmental impact cannot be quantified, the scope

¹⁶ In case project benefits cannot be fully ascertained, the cost benefit analysis may be forfeited in lieu of a cost-effectiveness analysis as outlined in Annex 5.

² For technically complex projects it would be advisable to engage a consultant (specialised in the field of the related topic) to prepare the related TOR in co-operation with the concerned line department/agency.

and nature of the possible environmental implications should be highlighted in the project proposal. An outline of the environment impact assessment is given in Annex 2.

Social/political analysis considers not only the effect of the project on the distribution objectives of development, but also the political acceptability of the project. Distributional objectives include raising incomes for target groups, creating employment, and improving standards of living (reduce mortality rate, increase literacy, etc.). As mentioned above, a further detailed outline of the techniques and approaches adopted in the preparation of a feasibility study is given in Annex 5. It should be noted that due to the specific scope sector/sub-sector.

4.4 Preparation of the Feasibility Study

The preparation of a feasibility study can be carried out by the concerned Ministry/Agency if internal and qualified personnel are available for this purpose. This is frequently not the case as line Ministries/Agencies are not expected to have this in-house capability/capacity. Alternatively, the feasibility study can be carried out by a local or external consultant depending on the technical complexity and nature of the project (reference is made in Chapter 2; Section 2.6.2 which also contains an outline on how the cost of consultancy services may be financed). It is, however, expected that the concerned Ministry/Agency would have the capability/capacity to prepare the TOR for the preparation of the feasibility study. A Format for Consultancy Terms of Reference (TOR) is given in Chapter 2: Annex 1.

The use of consultants in the preparation of a feasibility study and eventually the formulation of a project, has obvious advantages. Apart from reducing the immediate workload of the concerned Ministry/Agency which normally is not expected to have this in-house expertise or capacity, it may bring new thinking into the process of project design. Notwithstanding this, there is nevertheless a possible danger that the final project may receive an orientation towards the perception (and sometimes interest) of the consultant. This may in particular be the case when the consultant is financed through a foreign donor. To avoid such a situation, it is essential that the EPPD is fully involved in drafting the TOR of the consultant to ensure that an adequate scope and framework for the consultant is established. Furthermore, it would be advisable to establish a working group (e.g.) a Project Steering Committee of multi-disciplinary representation supervising the work of the consultant. The Project Steering Committee would normally (at this stage of the project cycle) be chaired by the concerned Government Ministry/Agency.

Upon completion of the feasibility study, the Project Proposal is to be structured as outlined in Chapter 2: Annex 6 before the document is forwarded to EPPD for appraisal.

4.5 Institutional Responsibilities

The overall responsibility for formulating a project rest with the concerned Ministry/Agency. The concerned Ministry/Agency will be expected to request relevant support from the following agencies:

- i) Ministry of Natural Resources and Environment (MNRE) for an assessment of the related environmental impact analysis. (The environmental impact analysis should

be incorporated as appropriate in the Project Proposal document and enclosed as a separate attachment).

- ii) Ministry of Women, Community and Social Development (MWCSD) for ensuring that social issues and their adverse effects are adequately discussed and addressed.
- iii) EPPD for the finalisation of the possible consultancy TOR.
- iv) EPPD in issuing acceptable sectoral discount rates for use in the financial NPV/IRR analysis.
- v) EPPD in issuing relevant shadow prices for use in the economic analysis.
- vi) EPPD in issuing acceptable sectoral discount rates for use in economic NPV/IRR analysis.

Techniques and Approaches for Feasibility Study Preparations

Market Research and Analysis

General

Market research and analysis should be carried out for the following main reasons:

- To establish whether the goods and services to be provided by a new productive unit are required by the community (the demand); and
- To estimate the volume which it would wish to acquire at given prices

There can be no discussion of profitability or of the other aspects of the feasibility study if there is no demand for the product. Therefore, the market study should include the following elements:

- Determination of potential demand for the project's output and the volume at given price range;
- Target group; and
- Timeframe for the demand.

This study would be relevant both to projects which produce “marketable” goods and services (commercial products) as well as to those which do not, such as school, hospitals, roads and the like. In the latter case, which are termed broadly as social goods and are supplied ‘free’ (due to the absence of a market price), it is more difficult to estimate the volume of demand. This, however, does not mean that a needs analysis can be ignored¹.

Steps in a market Analysis

Market analysis is sometimes conducted prior to a full feasibility study if this parameter or variable is considered very significant to the success or failure of the project. It is only after completion of this study that subsequent aspects in the feasibility study can follow.

The market analysis should seek to determine the following aspects:

- the size, nature and growth potential of total demand for the product
- the supply situation and the nature of competition
- the description and price of the product to be sold
- the different factors affecting the market
- the appropriate marketing programme for the product

Demand in Project Study

The analysis of the demand is to identify the needs of the consumers and determine whether they are willing and have the capability to pay for a given product.

The size, nature and growth of total demand for a product may be determined as follows:

- Who and where is the market?

- Segmentation of the market according to type, manner of use, income classification, location, age, etc. the manner of segmenting the market would depend on the type of product being considered.
- What is the total domestic demand from the historic point of view?
- Is there a foreign market, past trends, future projections, competition and comparative advantages?
- Evaluate demand growth patterns in the past and project future demand by applying appropriate projection methods.

Supply

The supply situation may be determined as follows:

- Who and where are the direct competitors? Classify them according to size, product quality, location, performance and market segment performance. Are there only a few big firms producing the product being considered (oligopoly or cartels operating)? Are there many small firms with no single firm controlling the market? Or is it an industry of big and small firms? The type of competition in existence would influence the decision on production capacity and marketing strategies.
- Determine historical domestic supply as comprised by local production and imports.
- If there is a foreign market, determine the historical supply patterns in the targeted countries as comprised by their local production and imports.
- Evaluate supply growth patterns and project future supply by applying appropriate projection methods.

Demand-Supply Analysis

Once the data on demand and supply situations have been established, the following analysis is carried out:

- Compare the demand and supply trends.
- Determine the unsatisfied amount of demand if demand appears to be fairly satisfied by supply, consider:
 - whether the factors affecting the market may disrupt the equilibrium so as to cause demand to grow faster than supply.
 - whether the quantity of the product is such that it may create additional demand or redirect part of the existing demand in its favour.
- Determine the market share using the proposed production volume (as determined in the technical analysis) as against the total market size.
- Conduct a price study.
- Identify other factors affecting the market.
- Draw up a marketing plan.

Product Description and Price Study

In addition, the following are taken into consideration with regard to product description and price study:

- Name of the product;
- Properties of the product (physical, chemical, etc.);

- Uses of the product (as finished product, intermediate goods); and
- Major users of the product (individuals, firms etc.).

In economic theory, the price is determined mainly by the demand-supply situation. An increase in demand with supply constant will normally lead to increase in prices. The reverse would result in the lowering of prices. Without any change in demand or supply, prices may go up if the costs of inputs such as raw materials rise, or prices may decline if the Government decides to subsidise production. Keeping all this in mind, the price study may be conducted as follows:

- Determine the selling prices of all similar and substitute products;
- Determine the historical pricing of these products (including the range and fluctuations) and establish the factors that will influence their fluctuations over time;
- Determine the responsiveness of demand to price changes; and
- Establish the product's selling price.

Factors affecting the Market

There are certain factors affecting the market that may be quantified or predicted:

- Demand may be significantly affected by population growth, income changes, taste, rural/urban development, prices of substitute and complementary products, and marketing techniques such as advertising, promotions, credit policies etc.
- Supply may be influenced by the development of substitute products, the entry or exit of firms from the marketplace, sources and costs of production, government policies, technology, availability, etc.
- Prices may be affected by production costs, price controls, inflation, price of substitutes, etc.

Marketing Programme

The final aspects of a marketing analysis would consist of a comprehensive marketing programme as follows:

- Determine the type marketing programme prevalent in the particular business sector and gauge their respective effectiveness.
- Draw up a marketing plan that identifies and defines the target market, the selling price, the packaging, the distribution network, the sales management mechanism and promotion activities. The important components of the marketing programme may best be summarised by the '4-Ps' i.e. product, price, place(distribution) and promotion.
- Design the marketing organisation which will implement the plan and determine the costs.

Conclusion

As in other studies, that of the market includes two stages: the collection of data and the establishment of empirical basis for their elaboration and analysis. Data collection is part of identifying the needs of consumers and determining whether they are willing and have the capacity to pay for the products. In forecasting demand, it is necessary to take into consideration not only production and import figures of the past, but also such other factors

as credit availability, income distribution, population growth, price variations, age composition, degree of urbanisation, taste and preferences, money supply, GDP etc. Thus, the analysis and elaboration stage will involve analysing both macro-economic variables, i.e., economic data that add up the activities of consumers, firms, government and the import-export sectors; and microeconomic variables, i.e. data on the level of the individual firm or at least on the level of an industry grouping. It should answer the fundamental questions of the study:

- How much can be sold? i.e. who and where is the market (total domestic demand and/or foreign market?)
- At what price?
- What are the marketing problems of the product? (direct/indirect competitors, growth patterns etc.)

Technical Analysis

General

Technical analysis is used to establish whether or not a project is technically feasible and to provide tentative alternatives to achieve the project's objectives. It is an attempt to determine the following:

- How well the technical requirements of the project can be met i.e. a discussion of issues such as:
 - → appropriate technology
 - → transfer of technology
 - → skills (management and technical);
- Which location would be the most advantageous?
- What would be the optimum size of a plant?

Steps in Technical Analysis

The technical feasibility analysis should consider various aspects and alternatives of a project as follows:

- preliminary research and testing
- selection of the production process (use of appropriate technology, labour intensive, capital intensive etc.)
- specification of operating and assembly equipment
- location, buildings and site layout
- plant layout
- supplementary engineering works
- efficiency
- flexibility of productive capacity
- work schedules
- size of the project
- organisation and management

Preliminary Research and Testing

Most engineering projects require a certain amount of preliminary tests and research. These tests cover widely varied matters: simple strength tests of the site for the construction of buildings; laboratory or pilot plant tests of the possibilities of using certain raw materials or processes, and the conditions under which such uses will be possible; experiments with new crops; metallurgical research into the treatment of ores, etc.

The project itself need only contain a clear summary of the information regarding these tests and research; the complete text of the respective reports may be attached as appendices.

Selection and Description of the Production Process

In many cases there may be no problems regarding the production process or system, but in other complexities and alternatives arise which should be explained together with the solutions offered, in relation to the preliminary research. To provide clarity and better presentation, the process can be described by the use of simple drawings or flow diagrams.

Selection and Specification of Equipment

There are two stages in the selection of equipment:

- Choice of the type, in order to draw up the specifications for the tender
- Selection between the various equipment of the type chosen in order to decide between the tenders.

Selection of the type of equipment will be influenced by the nature of the process, the scale of production and the degree of mechanization, all of which are closely inter-related. It may often happen, for instance, that a certain degree of mechanization is only applicable above a certain production level, and similarly certain processes lend themselves better to mechanization than others. The type of production is thus related to the degree of mechanization and automation.

The analysis of tenders for a given technology or engineering solutions not only a question of choosing the lowest tender in direct terms, but also entails other considerations such as:

- specifications or suitability for the type or raw materials
- minimum risk of obsolescence
- commitments for technical assistance and technology transfer
- alternative plant sizes/design flexibility
- maintenance and availability of spare parts
- cost factors and operating conditions

Sometimes the problem is further complicated by financial considerations relating to the nationality of the source of supply. Credit facilities, rate of interest, type of foreign currency required – convertible or not – and other considerations may also play an important part in the decision.

Location, Buildings and Site Layout

The technical feasibility analysis of a project depends largely on the proposed location as substantial differences usually exist in the availability, quality and costs of the various

requirements in an alternative location. Projects whose technical requirements could have been well taken care of in one location sometimes fail because they are established in another place where conditions are less favourable. In other words, a project situated in a location that is remote from services and supply sources such as experienced labour force, market, raw materials, utilities and other requirements would be operating with disadvantages.

An engineering project should include estimates of the size and characteristics of the buildings required for production and site layout. For agricultural projects this might include animal shelters, barns, crop storage and similar buildings; for mines they will be the surface buildings for housing machinery, workshops, etc. The problem acquires special interest in the case of manufacturing industry because the distribution of the industrial buildings has an important bearing on the handling and flow of raw materials, materials in process of manufacture and finished products.

Reception areas, stores, central workshops and other installations must be functionally situated in relation to the main factory building and transport services. The other important factor for consideration is the availability of space for future expansion. This means adequate land with acceptable physical characteristics.

Plant Layout

The efficiency of a project such as a manufacturing operation depends to a great extent on the layout of the plant and equipment, since this can lead to economy in movement and the flow of material and processes thereby saving time and money. Some other factors which need attention in plant layout are:

- storage space for raw materials and supplies
- space for internal transport
- utilities service systems including waste disposal
- interdepartmental communication
- future expansion flexibility
- environmental considerations

Supplementary Engineering Works

Projects must often cover additional installations to supply the services needed for actual production or for the employees/persons who will work on the project. Consideration of these supplementary works arising from the project's technical requirements - industrial water, electric power and similar items-will be more exacting than in the case of those needed to serve the population.

The quality and quantity of the buildings for housing, camps and welfare services for example be more flexible since in this case the criterion will be both economic and social, and will vary with circumstances. A solution has to be sought which is reasonable in cost, but which will at the same time provide the minimum comfort required by the workers and employees.

This association of various supplementary projects with the principal or central project may be indispensable in the case of agricultural, mining or industrial projects, which because of their nature must be situated close to natural resources and far from urban centres.

Efficiency

Once the manufacturing method, the size of the plant and the arrangement of equipment and buildings has been decided, it will be possible to calculate the volume of each type of input required by the project, both for installation and operation. Once the volume has been determined in physical terms, operating and input costs can be estimated. Moreover, this volume serves as a useful element of comparison when appraising the estimated administrative and operating efficiency of the enterprise.

The volume of input according to the physical processes employed, the quality of the available raw materials and the experience of other plants, can be estimated with the help of preliminary technical research. In addition to the purely technical factors, these estimates should also take into account the industry's general administrative and technical organisation and the quality of the labour available. This may lead to specific recommendations regarding the organisation and administrative structure of the enterprise, training, contracting advisers, etc. It may be also necessary to have laboratories for the technical checking of raw materials, the actual production process and final products as part of the quality control in accordance with the required specifications.

Flexibility of Production Capacity

The need for flexibility in production capacity is at times a result of seasonal demand. At others, it may depend on temporary limitations in the availability of raw materials, or a tight financial situation, which means that production has to be started on a limited scale in first stage. Naturally there are limitations in the approach to these problems, but if the conditions mentioned should exist, solutions should be sought which will tend to facilitate harmonious growth and permit flexibility of operation with minimum drawbacks, interference and cost.

Work Schedules

The schedule of project implementation from project preparation through plant start-up and the identification of potential causes of delay is one aspect of technical study. There must be realistic schedules which not only include all activities from engineering design through land purchase/acquisition, construction and procurement, to testing of equipment and training staff necessary for the successful completion of the project. These schedules should be arranged in a coherent sequence. The estimates of realistic schedules in terms of timing and cost are drawn up from experience with comparable projects in the same or similar environment.

The work schedule in a manufacturing project must ensure that the entry into operation is synchronized with the arrival or availability of raw materials. Even if the raw materials are to be produced locally or by the plant itself, the scheduled arrival of material such as the concept of 'just in time' should be given serious consideration. Conversely, if some of the materials must be imported, the work schedule must include the placing of the orders abroad, the approval of necessary permits, transportation, so that their arrival will be synchronized with the entry into operation of the enterprise.

Size of Projects

The size of a project usually means its production capacity during a normal operating period. Owing to the need for provisions for operating flexibility to meet demand fluctuations, the normal output will seldom be 100% of the installed capacity. Size is sometimes expressed in terms of the number of persons employed, the capital involved, or some other units. However, whatever unit of measurement this may be, the optimum size and the best location will be those which will lead to the most flexible operating efficiency and to the most favourable financial result.

Some important factors in considering the size of projects are:

- the volume of demand to be met;
- the relationship between size (or scale of production), technology and investment;
- the relationship between size and location or the geographical distribution of the market;
- the problem between size and financing of capital resources for the project; and
- administrative experience and capacity.

Conclusion

Since the technical analysis would cover both engineering and non-engineering aspects of a project, a checklist would definitely help a project officer in managing his/her varied tasks, even if a consulting firm has been appointed. The checklist would include those aspects that have been covered above and, amongst others, the examination of details such as technical description of the project, relevant project site characteristics and size, project implementation schedules, technical life of project, salvage values, availability of technical supporting staff and impact from the project.

Organisation and Management

General

This Section deals with the development and design of the organisation needed to manage and control the operation of the operational entity, and with the related overhead costs.

The aim of this Section is to describe the process of organisational planning and the structure of overhead costs, which can be decisive for the financial feasibility of the project. A division of the enterprise into organisational units in line with the marketing, supply, production and administrative functions is necessary not only from the operational point of view, but also during the planning phase, to allow the assessment and projection of overhead costs. Furthermore, it is essential for the feasibility of a project that a proper organisational structure should be determined in accordance with the strategies and policies of the operational entity.

The recommended organisation will depend on the social environment as well as on technoeconomic necessities. The organisational set-up depends to a large extent on the size and type of the operational entity and the strategies, policies and values of those in a position of authority in the organisation. It should also be borne in mind that organisations are not static, but develop with the project (pre-investment phases, start-up and operation).

While other sections specifically deal with direct costs, this Section will deal with indirect or overhead costs. Past experience shows that many feasibilities of studies neglect or underestimate these costs which in some projects may have a significant impact on their profitability. Considerations regarding the organisation of the project will help the analyst to identify and quantify these costs. The design and establishment of cost centres in line with the organisational structure will facilitate this task.

The Organisation

Organisation is the means by which the operational functions and activities of the operational entity are structured and assigned to organisational units, represented by managerial staff, supervisors and workforce, with the objective of coordinating and controlling the performance of the enterprise and the achievement of its business targets.

The organisational structure of an operational entity indicates the delegation of responsibilities to the various functional units of the entity, and is normally shown in a diagram, often referred to as an organigram. Usually, the organisation is designed primarily in line with the different functions in the operational entity, such as finance, marketing, purchasing and production. However, there is no unique organisation pattern. It is also possible to base organisational structures on products or production lines (for instance, profit or cost centres), or on geographical areas or markets; the latter are typical for marketing organisations.

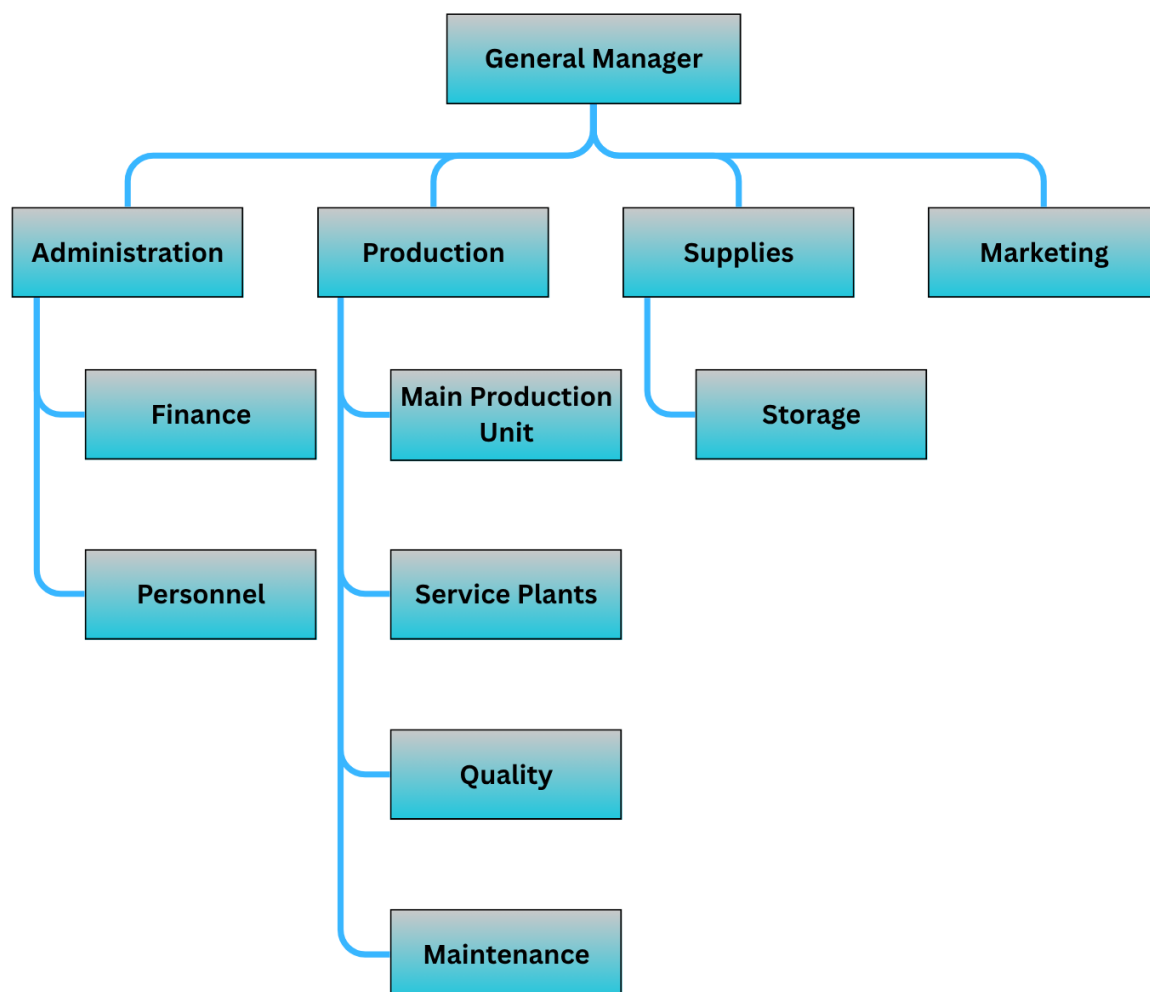
The problem of structuring and organizing the work and the delegation of executive responsibilities must not be seen only from the functional point of view, because various sociocultural factors may militate against the mere copying of such organisations. This aspect is also very important when special organisational structures are required for the optimal use of imported technologies.

Organisational functions

The organisational functions are the building blocks of the organisational entity. As reflected in Figure 4.3.1, they may be grouped into the following organisational units in line with the specific requirements of the individual operational entity:

- general management of the operational entity
- finance, financial control and accounting
- personnel administration
- marketing, sales and distribution
- supplies, transport, storage
- production:
 - main production unit
 - service units
 - quality assurance
 - Maintenance and repair

Figure 4.3.1. Example of an Organisation Chart for an Operational Entity



Organisational Structure

The organisational structure of the company can take a number of shapes, the most common being the pyramid shape, which has the following three organisational levels:

- top management, normally entrusted with long-term strategic planning, budgeting, co-ordination and control.
- middle management, normally entrusted with the planning and control of the organisational functions, such as sales, production, purchasing and finance.
- Supervisory management that plans and controls the day-to-day operations and activities within the organisational units under its supervision.

Regardless of the type of manufacture engaged in by a plant, the analysts will need to consider the establishment of a number of cost centres that are common to most manufacturing companies. These cost centres are explained below in the section on accounting and financial control. Cost centres will be described in terms of:

- placement within the organisation
- operational purpose, responsibilities and authorities
- main tasks
- labour and skill requirements
- inputs and outputs

Organisational design

A rough outline of organisational structures and of related costs may be included in a PIB, especially when organisational aspects could have a significant impact on the feasibility of a project. Usually the design of the organisational set-up of a project is covered in the feasibility study. The organisation design for both the construction (see section 5.3 Annex 4.1) and the operating phase depends on internal and external project requirements and conditions, and is prepared for the following two reasons:

- First, the organisation of the project and operational entity should aim at the optimal coordination and control of all project inputs. This makes it possible to implement the project strategies economically.
- Secondly, the organisational set-up serves to structure the investment and production costs and to determine the costs linked with the corresponding organisational units. For accounting purposes these costs are treated as overhead costs, unless they can be directly related to a specific product or cost centre.

The design of the organisation usually includes the following steps:

- The goals and objectives for the business are stated
- The functions that are necessary to achieve the goals are identified
- The necessary functions are grouped or related
- The organisational framework or structure is designed
- All key jobs are analysed, designed and described
- A recruiting and training programme is prepared

The result of the organisational design analysis invariably results in an organisational layout as shown in Figure 4.3.1. The organisational planner will then have to prepare the manning list for all organisational units in levels and categories of the personnel.

Other descriptive material may be included according to the local conditions and the way in which the operational entity functions.

Cost estimates

The manning tables prepared for each operational unit are the basis for estimating manpower costs. A distinction should be made between variable and fixed costs. There is a tendency to consider non-production labour costs as fixed and production labour costs as variable. This is generally too great a simplification; as most labour costs are semi-fixed or fixed in the short term. The feasibility study should provide information not only about the extent of these costs at certain production level, but also how they vary with production and over time. An identification of fixed and variable cost components as well as foreign and local currency components should be made.

The feasibility study should present the estimated labour costs for each operational unit and function. Underlying assumptions (such as average wages and salaries for different categories) should be presented. The costs should be divided into foreign and local currency components. When estimating the total wage and salary costs, provision should be made for the following personnel overhead costs:

- social security, fringe benefits and welfare costs
- installation grants, subsistence payments and similar cash costs that occur in connection with recruitment and employment
- annual deposits to pension funds
- direct and indirect costs of training
- payroll taxes

Environmental Impact Assessment (EIA)

General

Development in both the developed and the developing countries is very often accompanied by deterioration in the environment e.g. air and water pollution, erosion, salination, etc. These deteriorations not only have a negative impact on the quality of life, but also incur costs for any corrective actions

Experiences of many developing countries have recently shown that this need not be so if environmental considerations are incorporated into the development planning process. To a large extent many of the environmental problems associated with development can be avoided or minimized through the adoption of preventive action. This is in contrast to early periods of development when concerns for the environment were generally lacking. Environmental Impact Assessment is essentially a planning tool to prevent or keep environmental problems at acceptable levels. Environmental problems in the past have often resulted in additional costs for the rehabilitation and restoration of damaged area.

What is Environmental Impact Assessment?

Environmental Impact Assessment is generally considered as a planning tool which could assist planners in anticipating future impacts of a development project, both beneficial and adverse, with a view to maximizing beneficial impacts and to mitigating adverse impacts on the environment.

The procedures for carrying out Environmental Impact Assessments are contained in EIA Regulations 1998. The responsibility of preparing a project EIA starts with the concerned line department/agency. Normally the EIA is a continuous process during project formulation so that project design parameters will be adjusted accordingly. This approach limits "unfriendly" environmental design parameters to be identified towards the end of the project formulation phase. An EIA report is then pre-paid towards the end of project formulation and enclosed the project formulation document.

The procedures as applied in this Manual consist of three major steps:

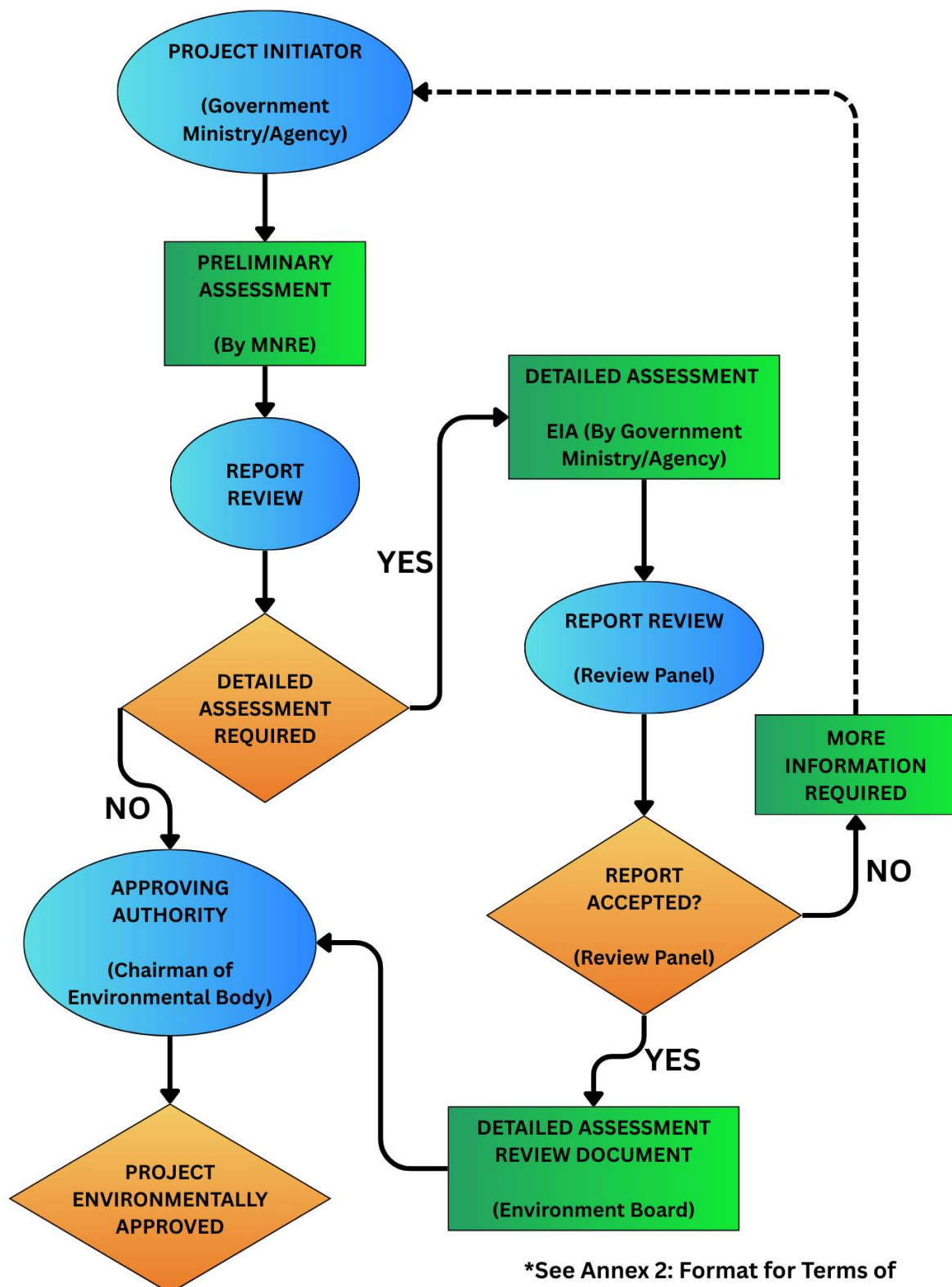
Step 1: Preliminary assessment of impacts due to the development of the project. The concerned line ministry/agency will obtain the preliminary assessment of ED at the PCN preparation stage of the project idea (Chapter 2; Annex 2 and 3)

Step 2: Detailed assessment and the preparation of EIA for projects which have significant environmental impact predicted in the preliminary assessment.

Step 3: Reviews of Steps 1 and 2 above. The review of the preliminary assessment is carried out internally by a technical committee in the detailed assessment is reviewed by an ad-hoc Review Panel comprising multidisciplinary participation. The results and the recommendations arising out of a review are then transmitted to the relevant project formulation agency for incorporation (as appropriate) into the feasibility study and attached as a separate document to the Project Proposal report (Chapter 2; Annex 6) before the proposal is submitted to the CDC for consideration.

The steps involved in the Environmental Impact Assessment are shown in Figure 4.4.1.

Figure 4.4.1: Outline of Environmental Impact Assessment Procedure



*See Annex 2: Format for Terms of Reference for a Full-Scale Environmental Impact Assessment

Activities Subject to Environmental Impact Assessment

Under the Lands, Survey and Environment Act 1989¹⁷, Environmental Impact Assessments are required for “Development Proposals”¹⁸. Under the Act, management plans for the protection, conservation, management and control of the national assets are drawn up. Activities which may be included under the Act could be, but not necessarily limited to:

- agriculture
- airport
- drainage and irrigation
- land reclamation
- fisheries
- forestry
- housing
- industry
- infrastructure
- ports
- mining
- petroleum
- power generation
- quarries
- transportation
- resort and recreational development
- waste treatment and disposal
- water supply
- trade (and imports)

¹⁷ The Act is currently being reviewed

¹⁸ “Development Proposals” means any plan, proposal or intention by any person to embark upon any activity, scheme, construction, project, development or undertaking which involves or may involve the consumption of terrestrial, coastal or marine natural resources or is likely to alter the environment in any way except for those activities explicitly excluded in writing by the Chief Executive Officer, Ministry of Natural Resources and Environment.

Government Ministry/Agency use only

Annex 6

Full Project Proposal Report on Project

For Project Title:	Project No:
--------------------	-------------

1. Broad Sector

Economic, Social, Infrastructure, Environment

2. Sector

As identified and set out in the Sector Planning Manual

3. Executing Agency

Government Ministry/Agency performing the necessary tasks to complete the project

4. Implementing Agency(s)

Government Ministry/Agency implementing the project

5. Background

- *Location of the proposal and development constraints to be addressed*
- *Description and relationship of the proposal to national development plan, related sectoral policies/plans and strategies, existing corporate plan outcome(s) and master plan if applicable.*
- *Timeline (Provide an estimated timeline for project completion)*

6. Project Objective(s)

- *The objective(s) of the proposed project should be clearly stated*

7. Outputs and Benefits

- *State and briefly describe each output and potential benefits of the project. Provide the summarised cost estimates of the total project cost broken down in foreign and local.*

Output (Name / Description)	Benefit	Amount	Source of Fund (Foreign / Local)
Component 1: ()			
Component 2: ()			
Component 3: ()			

8. Inputs

- *Explain how the project will be implemented successfully and ensure the delivery of the intended results of the project.*
- *Include information relating to the equipment & materials, construction & building, human resources and training, project support and technical assistance (if appropriate).*

9. Estimated Revenues and Costs / Financial Projection

Revenue and costs to be expressed in the following terms:

- *Revenue generation or cost savings (annual)*
- *Capital costs broken down in local and foreign capital estimates*
- *Recurrent costs broken down in local and foreign recurrent costs (annual)*

10. Cost-Benefit Analysis

The cost-benefit analysis to be expressed in terms of:

- *Financial Internal Rate of Return (FIRR)*
- *Economic Internal Rate of Return (EIRR)*

(If costs and benefits cannot be described in financial and/or economic terms, benefits and costs could be elaborated on within the concept of project cost effectiveness).

11. Project Sustainability

Project sustainability to be discussed within the following framework:

- *Project viability (Please provide information on feasibility study)*
- *Environmental aspects including addressing issues of climate change and disaster risk management (Please provide information or attach the EIA report)*
- *Socio/Cultural aspects*
- *Institutional and Management Capacity*
- *Policy support*

12. Project Implementation

Project implementation arrangements to be elaborated on under the following headings:

- *Responsibility of Implementing Agency(s)*
 - *Management and organisation of project implementation*
 - *Each activity or output should be allocated accordingly to ensure that they have a responsible personnel or agent*
- *Detailed implementation schedule*

13. Consultations with other Relevant Government Ministries/Agencies

List of consultations with other relevant government ministries/agencies

14. Signature of Head Line Ministry/Agency

Signature: _____

Name: _____

Designation: _____

15. Date of Submission

Project Appraisal Report on Project

1. Overall Assessment

a. Project Summary

The summary to be formatted as follows:

- *Project name*
- *Brief background including the development objective(s) of the project*
- *Total budget estimates*
- *Budget breakdown by components/phases*
- *Project duration (timeline)*

b. Strategic Alignment

- *National Development Plan Outcome(s)*
- *Current Sector Plan*
- *Master Plan (if applicable)*
- *Other related policies/strategies contribute to the overall objective of the project*

2. Cost Benefit Analysis

The cost and benefit analysis to be elaborated under the following headings:

- *Methodology including consultation with other ministries/agencies to firm up information for analysis*
- *Financial/Economic information*
 - *Financial/Economic costs*
 - *Financial/Economic benefits*
- *Assumptions*
- *Financial Internal Rate of Return (FIRR) / Economic Internal Rate of Return (EIRR) Analysis*

3. Potential Benefits and Costs

The potential benefits and costs to be elaborated on within the following headings;

- *Potential costs*
- *Potential benefits*

4. Concluding Assessment

Enclose the comments of the Ministry of Finance

5. Recommendations

6. Date and Signature of Assistant Chief Executive Officer, Economic Policy and Planning Division

Chapter 5

Project Appraisal

5.0 Executive Summary

The aim of the Project Appraisal is to examine the viability of a project before a decision on project implementation can be made.

The approach to Project Appraisal is to make a critical analysis of the assumptions made in the Full Project Proposal (FPP) document with regards to the:

- Inputs; and
- Outputs.

In this context, to also examine the soundness of how the inputs have been converted into outputs.

The institutional responsibility for preparing the Project Appraisal Report (Annex 7) rests with EPPD. The Project Appraisal Report (PAR) is to be submitted to the CDC for consideration as a Memorandum (Annex 8) together with the Project Proposal (Annex 6).

5.1 General

Project appraisal is the process of examining the attractiveness of a project from a market demand and from a technical, financial, economic, social, and political viewpoint before a project implementation decision can be made. The appraisal of a Project Proposal¹⁹ is the responsibility of EPPD before it submitted to CDC for consideration.

The appraisal is basically concerned with establishing the realism of the project assumptions, the accuracy, and the absolute level of the information presented in the project formulation document (i.e.) the Project Proposal. In line with this approach, a comprehensive project appraisal involves the analysis of not only the market demand and technical, financial, and economic aspects of a project, but also an appraisal of the contribution of the project to the achievement of national and sectoral objectives and strategies. These latter issues are addressed at the pre-appraisal stage of the related PCN (Chapter 3: Annex 3). Furthermore, in executing the appraisal process, it is necessary to apply a high degree of common sense particularly when assessing how the project design relates to, and is compatible with, socio-cultural issues.

In the case project formulation has been based on cost-effectiveness analysis and not cost-benefit analysis (Chapter 4: Section 4.2), this should be justified and reflected in the appraisal.

¹⁹ (Chapter 4: Section 4.3)

5.2 The Approach

The appraisal must assess whether the project is worthwhile, comparing it and its specific objectives with those of the sector and the nation as a whole. It should assess whether the design of the project is such that it will facilitate the achievement of objectives and an efficient use of resources in an environmentally friendly and sustainable manner. A well designed and formulated project will be easy to appraise, implement, monitor, and evaluate. In this respect, an efficient project is characterised by converting inputs into outputs in a cost-effective manner. As such, there are three fundamental processes in a project which need to be assessed:

- Outputs: Is there a requirement for the outputs of the project?
- Inputs: Are the inputs likely to be available?
- Conversion: What is the most efficient way of converting inputs to outputs?

The merit of this approach is that it can be applied to all types of projects. For example, schools have teachers and materials as inputs and students as outputs. Research projects have resources as inputs which if they are to be useful, should be converted into probable useful targeted outputs. Factories convert inputs into marketable outputs at the lowest possible cost. Agricultural projects consist of inputs of seed, labour, and other materials to yield goods which are to be consumed or sold.

In view of these fundamental processes in a project, the appraisal process should proceed with the project assessment in the following logical fashion.

5.3 The Objectives

The project should have clearly defined objectives. The principal purpose of establishing clear objectives is to avoid inconsistency and contradictory objectives emerging from projects having been identified in isolation. By following the procedures adopted for project identification (Chapter 3) and project formulation (Chapter 4), the risk of implementing projects with inconsistent and contradictory objectives is minimised.

5.4 The Outputs

If the outputs are saleable products, it is necessary to make a judgement as to the effective demand for the products. If the outputs are not saleable, it will be necessary to assess whether it is a requirement for them and whether this would be justified on socio-economic grounds (this would normally entail a judgement of appropriate thoughts of the concerned community.) While the principal question relates to the market or the demand for the product, it can be divided depending on the size and complexity of the project into the following questions:

- If the quantity added to the market is likely to be very significant, a proper market analysis would be required – if it is insignificant, an intelligent judgement is all that is required.
- If a different quality type product is being offered, a market research analysis would probably also be required.

- Since the timing of the output coming onto the market could be crucial, care would have to be taken to assess what the effect would be if the increase envisaged was of an immediate nature.

5.5 Inputs

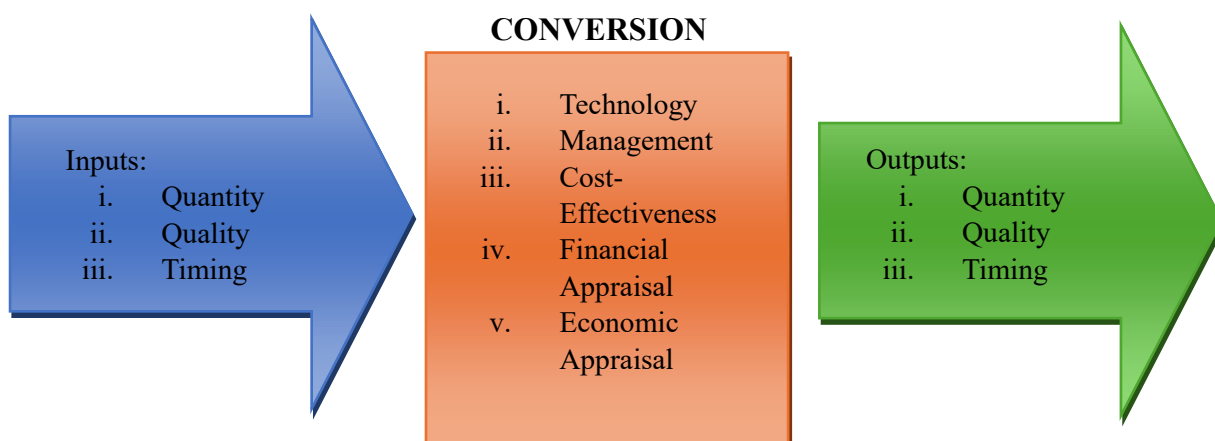
The principal question is whether inputs will be available. This depends on the size and complexity of the project. Three questions must be answered:

- Will the scale of inputs required be available?
- Will the quality be satisfactory?
- Will inputs be available at the right time?

5.6 Conversion

Considering the way inputs are converted into outputs; this requires the following systematic assessment:

- Is the proposed technology appropriate and is it technically feasible?
- Is the management required likely to be available and effective?
- Is the institutional and policy framework appropriate?
- Is this the most cost-effective solution, what options have been considered?
- Does it provide acceptable and best financial and economic rate of returns?
- Are the possible environmental implications acceptable?



The virtue of this approach is that it enables the appraiser to proceed from simple judgement to full techno-economic appraisal in a logical sequence which may expand with the nature and the scale of the project. In most of the cases, it would be quite possible to make a quick judgement as to whether the marketing requirements for the output, the input needs, and the system proposed for converting inputs into outputs are reasonable. Obviously as the scale of the investment increases and it becomes technologically and managerially more complex, much greater care would have to be exercised. In this case, EPPD might consider it advisable to engage an independent consultant²⁰. (a format for Consultancy Terms of Reference is given in Annex 1 of Chapter 2)

²⁰ If EPPD requires the funding of a local or foreign consultant, MOF is required to solicit budget funding.

5.7 The Format

The format of the Project Appraisal Report is given in Annex 7.

5.8 Institutional Responsibilities

The EPPD is responsible for the preparation of the Project Appraisal Report. As the EPPD does not always have the relevant in-house technical expertise to deal with aspects of the appraisal, EPPD may need to seek independent advice and judgement from relevant Government Ministries and Agencies. If this advice/judgement is not available, EPPD would need to seek the relevant advice/judgement from external consultants as appropriate²¹. (a Format for Consultancy Terms of Reference is given in Annex 1 of Chapter 2)

²¹ If EPPD requires the funding of a foreign consultant, MOF may contact ACC to solicit funding.

CDC Secretariat (EPPD) use only

Annex 8

CDC Paper Number

Memorandum on Project Appraisal on Project (Title or name) submitted by (Government Ministry/Agency) for Cabinet Development Committee (CDC)

Salient Project Features

1. Project Objective(s)
2. Revenue/Cost savings
3. Total Costs (Capital investment costs, recurrent costs, etc.)
4. Financial Internal Rate of Return and Economic Internal Rate of Return
5. Potential donor
6. Economic Policy and Planning Division (EPPD) Comments
7. Recommendations

The memorandum is a project appraisal of a related Project Proposal submitted by a Government Ministry/Agency for the consideration of CDC. The memorandum is to be prepared by EPPD. A copy of the Project Appraisal report to be forwarded to the concerned Government Ministry/Agency and discussed (as appropriate) before the memorandum is submitted to CDC for consideration.

Project Implementation Monitoring

6.0 Executive Summary

The aim of Project Implementation Monitoring is to measure the progress of project implementation for the project to reach its objective(s) within the financial framework set forth at the start of project implementation.

The steps in Project Implementation Monitoring is as follows:

- Once the Budget and Fiscal Policy Division (BFPD) has finalised the financial arrangement required for project implementation, the Executing Agency (EA) and the EPPD of the Ministry of Finance has to establish a Project Steering Committee (PStC).²²
- EA to call the first PStC meeting and submit a schedule of meetings for the project implementation period.
- At the first PStC meeting the Controlling Officer of EA will submit:
 - An updated and revised Project Implementation and Monitoring Plan (Annex 9) which would include:
 - A breakdown of the project in logical work packages (activities) for the project to reach its objective(s); and
 - The scheduling of the related work packages (activities).
 - An updated and revised Project Costing Report (Annex 10);²³
 - A copy of the agreement with the Implementing Agency (IA) to implement the project;
 - The scheduling of project implementation funds requirements (as a ministry budgetary output) for the related budget years;
 - A schedule of regular Project Implementation and Monitoring Reports (Annex 9);²⁴ and
 - A schedule of regular Project Costing Reports (Annex 10).
- On the basis of the first PStC meeting, the EA will prepare an outline of the first PStC meeting for submission to CDC.
- The EA will prepare Project Progress Reports (Annex 11) as agreed with EPPD in consultation with BFPD.
- EPPD will submit the appraised Progress Reports with the Memorandum (Annex 13) as and when required by the CDC.

The institutional responsibility of Project Implementation Monitoring rests with the BFPD, but the information base to undertake the Project Implementation Monitoring is to be provided by the EA, to the EPPD.

²² There may have also been a PStC supervising project preparation.

²³ The updated and revised Project Costing Report is to form the basis for the preparation of the 1st Progress Report to EPPD.

²⁴ In case the project is donor funded. Annex 9 and Annex 10 may be adjusted to follow the reporting formats of the concerned donor, if appropriate and if the scope of the donor reporting meets national requirements.

6.1 General

Project implementation monitoring is the continuous process of assessing both the efficient functioning of the project activities in the context of the implementation schedules and the efficient use of project inputs (financial resources) to reach the project objective(s). Project implementation monitoring is therefore closely linked to the achievements as stated in the Project Implementation Plan (Annex 9). This reflects the project design parameters developed during project formulation and assessed at the stage of project appraisal.

The purpose of project monitoring is thus to enable management at each level of authority to measure the progress of project implementation in achieving the immediate and long-term project objectives. As such, project monitoring is a management tool and not an end in itself. The level of effort required should therefore be designed in such a way that it provides the required information at the right time, streaming to minimise any undue burden on the project management.

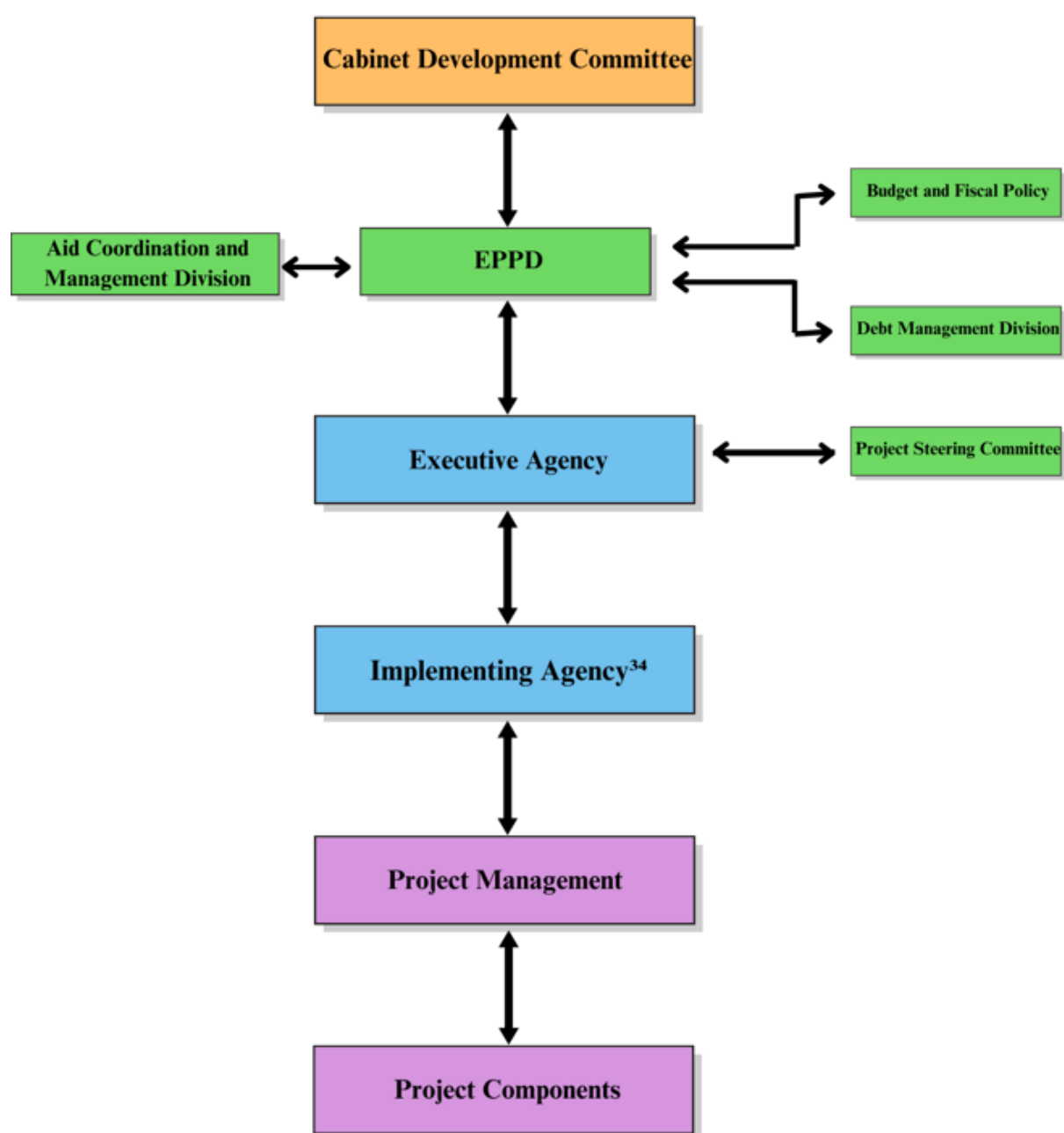
6.2 The Institutional Setting

6.2.1 General

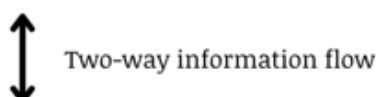
The Budget and Fiscal Policy Division (BFPD) of the Ministry of Finance is responsible for the efficient management and use of the financial resources of Government. In this context, EPPD will appraise the Project Progress Reports (Annex 12) in close consultation with BFPD and then submit by the Executing Agency (EA) together with a Memorandum to CDC (Annex 13).

The purpose of project monitoring per se in terms of physical progress is the responsibility of the Implementing Agency (IA). In executing this responsibility, the IA will interact closely with the EA and the Project Steering Committee (PStC). The IA will in this respect submit a draft Project Progress Reports (Annex 11) as an agenda item for PStC meetings. The Project Progress Report will after the related PStC meeting be submitted by EA to EPPD. The Project Progress Report is to be accompanied by a Memorandum (Annex 13) which will be prepared by EPPD in close consultation with either BFPD, ACMD, and DMD (based on funding source) for submission to CDC.

Figure 6.1: Relationship between the Government Ministries/Agencies involved in project implementation



Legend:



6.2.2 The Role of the Project Steering Committee

The role of the PStC (chaired by the BFPD or alternatively by the concerned Government Ministry/Agency), is twofold.

Firstly, it will be a forum addressing project implementation problems and issues related to project implementation performance. Furthermore, the PStC will advise on possible project variation orders (including their financial implications) and/or requests for additional funds. Secondly the PStC will serve as a forum and a meeting place between the project planners, the implementers and the policy decision makers. The reason for the latter function is the need to maintain a focus on the project objective(s).

As the project has emanated from the related analysis of the national policy framework and the strategy to strengthen related sectoral developments through the implementation of projects and programs, it is essential to maintain continuous communication between the policy decision makers and the project implementers to ensure that the outcome of the project is in line with the related policies and strategies.

6.2.3 The role of the Executing Agency (EA)

The role of the EA (the responsible Government Ministry/Agency for the project), will be to ensure efficient functioning of the project activities and timely project implementation. In fulfilling this obligation, the EA will report on a six-monthly basis through the submission of Project Progress Reports to EPPD (in close consultation with (ACMD/DMD/BFPD) on the physical and the financial progress of project implementation. In order to accomplish this task, the EA will enter into an agreement with the agency which will implement the project (i.e.) the Implementing Agency (IA). In the case of the implementer of a project being the EA, the referenced implementing party would be the Technical Section of the EA or a Consultant appointed by the EA to supervise the implementation of the project on behalf of the EA.

6.2.4 The role of the Implementing Agency (IA)

As the responsible implementer, the IA will on a day-to-day basis monitor the physical as well as the financial progress of project implementation. This will take the form of a continuous assessment of both the efficient functioning of the project activities in meeting the implementation schedules and the efficient use of the financial inputs allocated to the project. Project monitoring will in this perspective be an internal project activity of the IA and an essential part of the day-to-day management of the project implementation. Regular meetings (weekly, fortnightly, or monthly depending on the nature of the project) will be conducted between the IA and the EA. The main purpose of the meetings is to identify and solve possible implementation problems at an early stage.

6.3 Project Implementation Monitoring

6.3.1 Planning for Project Implementation Monitoring

Once a project has been approved by CDC and project funding is secured through the ACC and/or the Financial Agreement is finalised by the BFPD²⁵ of the Ministry of Finance, the EA will appoint a Controlling Officer (CO), normally the head of the EA, as the focal point for project implementation. The CO will initiate the completion of the tasks outlined in Chapter 2 (Section 2.3, Phase III, item 7), and in particular prepare the revised and up-dated Project Implementation and Monitoring Plan (i.e.) the preparation of an adjusted and updated Bar (Gantt) Chart. As shown in Section 5.4 in Annex 9, the main feature of the Project Implementation and Monitoring Plan (Bar Gantt Chart) is the breakdown of the project in logical work packages or activities which are scheduled for completion during the implementation of the project. The breakdown of the project into discrete activities, reflects the activities which are necessary for the project to reach its objective(s)²⁶. The scheduling of the activities during the project implementation period is based on a logical sequencing and analysis of the dependency relationship and possible interaction between individual activities²⁷. The time period required to complete individual activities is estimated by the identification of the expected date of commencement and the expected date of completion for each activity.

In Annex 9 is given a Project Implementation and Monitoring Plan for a sample health project.

In terms of monitoring, the progress of each activity is denoted by a separate bar as it relates to the bar indicating the original planned implementation of the related activity.

Parallel to the updating and adjustment of the Project Implementation and Monitoring Plan, the CO will prepare the updated and revised costing of each activity. This information will be presented in the Project Costing Report (Annex 10)²⁸.

The revised and updated Project Implementation Monitoring Plan and the revised and updated Project Costing Report will form the basis for EA's preparation of the 1st Progress Report (Annex 11) to EPPD which in turn will prepare a Memorandum (Annex 13) in consultation with BFPD for submission to CDC.

In order to streamline the related information on project activity breakdown, activities scheduling and costing, it would be advised to structure the tendering documents in such a way that this information will be part of the tendering process and the selection of the most qualified tenderer.

On the basis of the up-dated Project Implementation and Monitoring Plan and the annual schedules on Project Costing, the CO will negotiate an agreement with the IA for the implementation of the project.

²⁵ ACMD if funded through foreign aid or DMD if through borrowing.

²⁶ The application of network analysis through the use of the Cabinet Path Method (CPM) and/or the Program Evaluation Review Techniques (PERT) could be useful techniques in preparing an estimate of the overall implementation period and the scheduling of individual project activities.

²⁷ It is understood that the breakdown and the costing structure of the related project activities are compatible with the performance budgeting structure currently being established by the Government. As explained in footnote 4) a full financial and cost monitoring may not be possible.

²⁸ It should be noted that the stipulated project funding requirements have already been approved by the Ministry of Finance.

6.3.2 Annual Budget Allocation

Once the Project Implementation and Monitoring Plan and the annual schedules on Project Costing are available, the CO will forward the documentation to BFPD as ministry's budgetary outputs of the EA for formal inclusion in the related budget year²⁹.

6.3.3 Disbursement of Project Funds

The schedule of disbursement of funds to the IA or the contractor (as appropriate) outlined in the project implementation agreement between the EA and the IA, would normally be linked to the satisfactory completion of the related project activities. For complex projects and in order to certify the satisfactory technical completion of the related projected activities, the EA may appoint a Consultant. The request for disbursement from the IA will be endorsed by the Consultant before it is forwarded by the CO to BFPD for payment.

6.3.4 Problem Solving

Project implementation problems are primarily solved at the regular or ad hoc meetings (as appropriate) between the IA and the EA. Where implementation problems cannot be solved at the EA/IA level, it would be the responsibility of the EA to raise the relevant issue(s) at the regular or ad-hoc meetings (as appropriate) of the PStC.

6.3.5 Reporting

The reporting responsibility of the IA to the EA is represented by the submission of the following two quarterly monitoring reports:

- i. An updated Project Implementation and Monitoring Plan (Annex 9)
- ii. An updated Project Costing Report (Annex 10)

On the basis of these two reports the EA is to prepare and submit Project Progress Reports (Annex 11) as agreed with BFPD with a separate report (as appropriate) explaining possible problems arising and remedial actions being taken. The related Project Progress Report will (as appropriate) be an agenda item for the related PStC meeting. For project falling behind the project implementation schedule by 10% and/or projects with cost over runs of 10%, the IA is required to prepare the above documentation ((Items (i) and (ii)) every month as the basis for the EA to prepare Project Progress Reports as agenda items for the regular PStC meetings.

As part of EPPD's reporting responsibility to CDC, EPPD in consultation with BFPD will prepare a Memorandum (Annex 13) accompanying the relevant Project Progress Report to CDC.

At the end of the project, the EA/IA will prepare a Project Completion Report for the EPPD's endorsement in consultation with BFPD. In Annex 14 is given a format for the Project Completion Report. EPPD will in turn prepare a Memorandum (Annex 16) on the Project Completion Report for submission to the CDC.

²⁹ In case the project is donor funded, Annex 9 and Annex 10 may be adjusted to the reporting formats of the concerned donor, (if appropriate) and if the scope of the donor reporting meets the requirements of the IA and EA.

6.4 Institutional Responsibilities

The institutional responsibility of the various agencies and parties involved in project implementation is summarised as follows:

- i. Government Ministry/Agency responsible for project identification and formulation of CDC approved projects will act as the EA.
- ii. BFPD with the assistance of ACMD if it is a foreign aid or DMD if it is a foreign borrowing from abroad, will finalise the financial arrangements required for project implementation.
- iii. EA and BFPD³⁰/EPPD to establish a PStC, where necessary.
- iv. EA will negotiate and sign an implementation agreement with the Implementing Agency (IA). Alternatively, with a Consultant of the Technical Section of the EA for the implementation of the project.
- v. IA and EA will conduct regular project implementation meetings.
- vi. IA will submit regular updated Project Implementation and Monitoring Plans and Project Costing Reports to the EA. The reports will be used as the basis for the EA to prepare the related Project Progress Reports as agenda items for PStC meetings.
- vii. EPPD will prepare a Memorandum accompanying the Project Progress Report for submission to CDC.
- viii. EA/IA will at the completion of the project, prepare a Project Completion Report for endorsement by EPPD in close consultation with BFPD. EPPD will submit the Project Completion Report to CDC with a Memorandum. See also Section 7.3.3, Project Evaluation Completion.

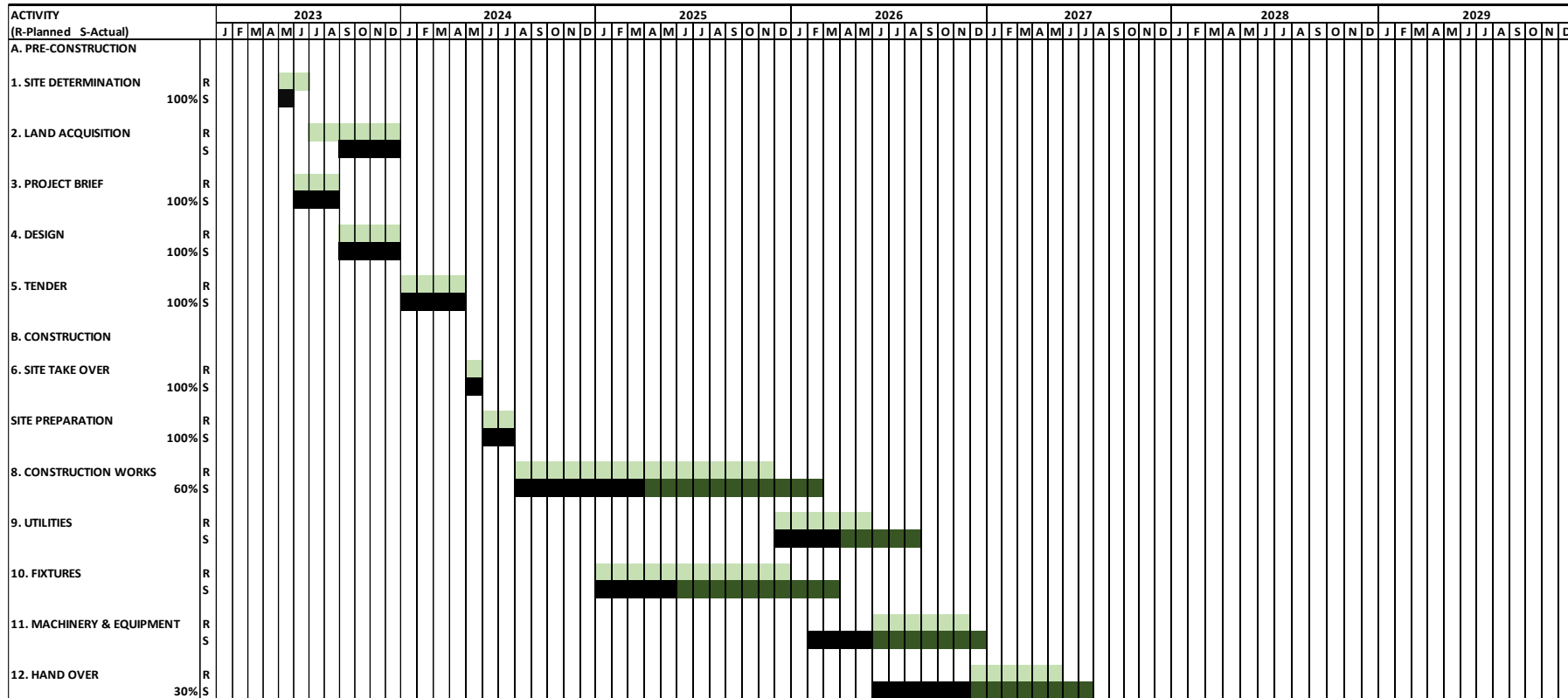
³⁰ With the assistance from ACMD if it is a foreign aid and/or DMD if it is a borrowing from abroad.

Annex 9: Project Implementation and Monitoring Plan

Annex 9

Project Implementation and Monitoring Plan (Bar (Gantt) Chart)for Sample Health Project

Component No : Name of Project : GENERAL HOSPITAL Budget SAT\$ Allocation : Line Department : MINISTRY OF HEALTH
District : Name of Component : CONSTRUCT 2 BLOCKS OF NURSES HOSTELS Component Cost : SAT\$ Implementing Agency : PUBLIC WORKS DEPT
Ministry : MINISTRY OF HEALTH



Name of Reporting Officer :

Post & Address :

Tel No :

Recording Date :

Date :

Legend :

- Planned

- Completed

- Yet to be Completed

Fax No :

Annex 10: Project Costing Report

Annex 10

Project Costing Report for Sample Health Project

Name of Reporting Office :
 Address :
 Telephone No. :
 Fax No. :
 Reporting Date : Date

Project No:		Component No: (if applicable)		
Name of the Project: GENERAL HOSPITAL		Allocation: SAT\$		
Name of the Component: CONSTRUCT 2 BLOCKS OF NURSES' HOSTELS		Component Cost: SAT\$		
Executing Agency: MINISTRY OF HEALTH		Expenditure (SAT\$)		
Implementing Agency: PUBLIC WORKS DEPARTMENT				
Codes	District	Ministry	Dept.	

Activity	Costs			Latest revision as percentage of original
	Original	Latest Version	Expenditure	
1. SITE DETERMINATION				
1. LAND ACQUISITION				
1. PROJECT BRIEF				
1. DESIGN				
1. TENDER				
1. SITE TAKEOVER				
1. SITE PREPARATION				
1. CONSTRUCTION WORKS				
1. UTILITIES				
1. FIXTURES				
1. MACHINERY AND EQUIPMENT				
1. HAND OVER/COMMISIONING				
Total Costs				

Government Ministry/Agency use only

Annex 11

Progress Report (*Number*) on Project: (*Name*)

1. Purpose of Submission

The purpose of the submission to be elaborated on (as appropriate) under one of the following headings:

- *Project progress report (state period reported on)*
- *Project variation*
- *Supplementary funds requested*
- *Other*

2. Executing Agency

3. Implementing Agency

4. Previous CDC Meeting(s)

Reference to be made to previous CDC meetings under the following headings:

- *Previous CDC actions requested*
- *Previous CDC actions completed*

5. Funding Sources and Conditions

Funding to be elaborated under the following headings:

- *External assistance*
- *Local/Government contributions*

6. Current Financial Status

The financial status of the project to be elaborated on (as appropriate) for certain donor funded projects, project expenditures which occur in donor country may or may not be made available to the Executing Agency under the following:

- *Total expenditure to date*
- *External funds received*
- *Government financial resources approved*
- *Amount approved in current budget year*
- *Amount already disbursed to by Implementing Agency*

7. Additional Resources Requested

Requests for additional resources to be elaborated on under the following headings:

- *External*
 - *Capital inputs*
 - *Programme support*
- *Local/Government*
 - *Capital inputs*
 - *Programme support*
 - *Recurrent costs*

8. Statement in Support of Submission

Statement in support to be made under the following headings:

- *Status report on implementation (% of physical completion)*
- *Balance of project still to be completed*
 - *Remaining works or activities*
 - *Revised implementation schedule*
 - *Revised total project costs*
 - *Capital costs*
 - *Recurrent costs*

9. Possible Implications on the Project

The possible implications of the project to be elaborated on under the following headings:

- *Project financial and economic rate of return*
- *Project reaching its objectives*
- *Project sustainability*

10. Summary of Issues

List all the main issues that have been identified and need to be addressed

11. Recommendations for Consideration

An outline of the recommendations for the CDC's consideration

12. Signature of Executing Agency

13. Date of Submission

Ministry of Finance use only

Annex 12

Progress Report (*Number*) on Project: (*Name*)

1. Purpose of Submission

The purpose of the submission to be elaborated on (as appropriate) under one of the following headings:

- *Project progress report (state period reported on)*
- *Project variation*
- *Supplementary funds requested*
- *Other*

2. Executing Agency

3. Implementing Agency

4. Summary of Issues

5. Assessment of Submission

The assessment to focus on how the submission impacts critical project parameters within the following framework:

- *What are the implications of the project reaching its development objectives?*
- *What are the implications of the project design?*
- *What are the gender implications of the project?*
- *What are the environmental implications of the project?*
- *What are the implications of the total project capital costs (broken down in local and foreign costs components) and the recurrent costs and how does that affect the overall financial fund allocation?*
- *What are the implications on the financial and economic returns (alternatively the cost effectiveness) of the project?*
- *Have alternative solutions been considered?*
- *What are the implications on the schedule of the project completion?*
- *Are the proposed recommendations based on sound judgements?*
- *What would be the implications of not approving the recommendations?*

6. MOF Comments

7. Recommendations

List of recommendations for the CDC to consider

8. Signature of ACEO, MOF

9. Date of Submission

CDC Secretariat (EPPD) use only

Annex 13

CDC Paper Number

Memorandum on Progress Report (*Number*) on (*Project Name*) submitted by (*Agency*) for Cabinet Development Committee

Salient Project Features

1. *Projective Objectives*
2. *Original Costs*
3. *Latest Approved Costs*
4. *Donor:*
5. *EPPD Comments:*
6. *Recommendations:*

The Memorandum is an assessment of the progress report on project implementation prepared by the Executing Agency. The Memorandum is to be prepared by EPPD and submitted to CDC for consideration.

Government Ministry/Agency use only

Annex 14

Project Completion Report on (*Project Name*)

10. Purpose of Submission

The purpose of the submission to be elaborated on

11. Executing Agency

12. Implementing Agency

13. Previous CDC Meeting(s)

Reference to be made to previous CDC meetings under the following headings:

- *Outline Project Progress Reports submitted to CDC and actions requested*

14. Status at Project Completion

Outline on the status of the project under the following headings:

- *Achievements made*
- *Project handover to Operating Agency (OA)*
- *Capability and capacity of OA to operate the project for the project to meet its objectives (availability of qualified personnel)*
- *Management structure of OA*

15. Funding Sources and Conditions

Funding to be elaborated under the following headings:

- *External assistance*
- *Local/Government contributions*
- *Funding requirements of the OA (recurrent costs)*

16. Financial Status

The financial status of the project to be elaborated on under the following headings:

- *Total expenditure*
- *External funds received*
- *Government financial resources approved*

17. Possible Implications on Project

The possible implications of the project to be elaborated on under the following headings:

- *Project financial and economic rate of return*
- *Project reaching its objectives*
- *Project sustainability*
- *Requirements for further external assistance*

18. Summary of Issues

List all the main issues that have been identified and needed to be addressed

19. Recommendations for Consideration

An outline of the recommendations for the CDC's consideration

20. Signature of Executing Agency

21. Date of Submission

CDC Secretariat (EPPD) use only

Annex 15

Appraisal of Project Completion Report on Project: (Title/Name)

7. Purpose of Submission

8. Executing Agency – *government ministry/agency performing the necessary tasks to complete a project*

9. Implementing Agency – *government ministry/agency responsible for implementing the project*

10. Summary of Issues

11. Assessment of Submission

The assessment to focus on how the submission impacts critical project parameters within the following framework:

- *What are the implications of the project reaching its development objectives?*
- *What are the implications on the project design?*
- *What are the implications on the total project capital costs (broken down in local and foreign cost components) and the need for budget allocations recurrent costs when the project is in its operating phase and how does that affect the overall financial fund allocation?*
- *What are the implications on the financial and economic returns (alternative the cost effectiveness) of the project?*
- *Are the proposed recommendations based on sound judgement?*
- *What would be the implications of not approving the recommendations?*

12. BFPD Comments

13. Recommendations

14. Signature of Assistant Chief Executive Officer, EPPD

15. Date of submission

CDC Secretariat (EPPD) use only

Annex 16

CDC Paper Number

**Memorandum on Project Completion Report on Project
(Title/Name) submitted by (Government Ministry/Agency)
for Cabinet Development Committee**

Salient Project Features

1. *Project Objective(s)*
2. *Original Approved Cost:*
3. *Latest Approved Costs*
4. *Original FIRR*
5. *Donor*
6. *BFPD Comments*
7. *Recommendations*

The memorandum is a project completion report of a related development project submitted by a government ministry/agency for the consideration of CDC. The memorandum is to be prepared by BFPD

Chapter 7

Project Evaluation

7.0 Executive Summary

The aim of Project Evaluation is to re-examine, in light of the subsequent projects' implementation, the project rationale as stated in the project formulation and appraisal documents.

The ultimate purpose of Project Evaluation is not to prepare a judicial verdict, but to draw lessons from the experience of project implementation in order to adjust the intervention strategy of the existing project, to alter other ongoing projects or to improve the design of ones to follow. Evaluation is conceived in this Manual as a way to learn from development efforts so as to improve the design of ones to follow. Evaluation is conceived in this Manual as a way to learn from development efforts so as to improve the development process.

The Project Evaluation process focuses attention on the following three main features of the project:

- Performance of the project;
- Outputs, effects and impact of the project; and
- Economic and financial efficiency of the project.

In this context, Project Evaluation is normally carried out at one or more of the three following stages of the project cycle:

- During project implementation when there is definite evidence that the project will not meet its development objective(s). This evaluation, which is referred to as the Pre-Project Completion Evaluation, allows corrective measures to be taken in terms of project redesign, improved implementation organisation/management, etc. for the project to achieve its development objective(s) or its redefined development objective(s).
- At the end of project implementation when the project funding is to be finalised. This evaluation which is referred to as Project Completion Evaluation would address the sustainability of the project as many services and inputs are either discontinued or drastically reduced at this point in the project cycle.
- Some years after the termination of the project when its long-term effects and impacts are visible. This evaluation, which is referred to as Post Project Evaluation, focuses on the lasting impacts of the project

Most Memoranda of Understanding on development co-operation signed between Government and respective donors would provide stipulations on project evaluations. As the aim of the related evaluations are generally the same for the Government and the respective donors, it would be appropriate to undertake joint project evaluations.

This would mean the preparation of joint TOR of the evaluation and ensuring that Government representatives are members of the evaluation team. In case this approach cannot be materialised, it would be advisable to follow the Government criteria to initiate separate project evaluations and proceed accordingly.

At the completion of a Project Evaluation, EPPD is to prepare a Memorandum (Annex 19) attaching a copy of the project evaluation report for submission to CDC.

7.1 General

Project evaluation is project appraisal in reverse in the sense that it takes place after project implementation has commenced and focuses attention on what has been achieved. It examines in detail the original basis and assumptions used in project identification, formulation, and appraisal. In addition, project evaluation focuses attention on the strategy and approach of project implementation. It compares actual outcomes with expected outcomes. In this context evaluation entails an independent, systematic, and objective analysis of a project's performance, efficiency, and impact in relation to the objectives which the project was originally designed to reach. Its ultimate purpose is not to prepare a judicial verdict (although some evaluations do) but to draw lessons from experience in order to adjust the intervention strategy of the existing project, to alter other ongoing projects or to improve the design of ones to follow. Evaluation is conceived in this Manual as a way to learn from development efforts so as to improve the development process.

An evaluation attempts to:

- Critically re-examine, in the light of subsequent project implementation, the project rationale stated in the formulation and appraisal documents;
- Determine the adequacy of the project to overcome the identified constraints to be solved and thus to promote desired changes;
- Compare the actual attainments with the targets set and identify the reasons for shortfalls or over- achievements;
- Assess the efficiency of project implementation procedures and the quality of managerial performance;
- Determine the financial and economic efficiency of the project;
- Determine the effects and impacts (including the environmental impact) of the project; and
- Present the lessons learned and the recommendations that follow from them.

This broad agenda will not necessarily be achieved in every case, and some parts of it should only be undertaken selectively. Nevertheless, it gives the scope of the evaluation function. This chapter discusses the substantive focus and types of evaluation undertaken for development projects.

7.2 Formal Project Evaluation³¹

7.2.1 General

Formal project evaluation as conceived in this Manual is the formal evaluation of projects, evaluated within the framework given in Section 7.1. In this context evaluation is an independent evaluation of the original design features of the project which focuses attention on the three following main features of the project:

- i. Performance of the project;
- ii. Output, effects, and impact of the project; and
- iii. Economic and financial efficiency of the project.

7.2.2 Performance

The best understood element of an evaluation is the assessment of performance of the project. This, broadly defined, includes a review of all the activities undertaken by the project to achieve its originally stated objectives. These could range from constructing physical infrastructure through providing technical advice to beneficiaries and/or departmental services to the community. A performance evaluation requires a comprehensive, retrospective look at the project from its inception to the time of the evaluation. The items usually covered in such an evaluation include the following.

- *Project identification, preparation, and appraisal.* The review should include an assessment of the quality of project identification and the PCN (Annex 3), the Project Proposal (Annex 6) and the feasibility studies undertaken, the commitment and the capability of the executing/implementing agencies, and the adequacy of the Project Appraisal Report (Annex 7)
- *Project specification.* The objectives, components, activities, targets, and underlying intervention models should be reviewed. Specific questions which an evaluation seeks to answer are: How were the project's objectives determined? Were they consistent with national goals? Were the project components and strategies adequate to achieve the targets? Were the targets realistic? Was the intervention model technically and practically sound?
- *Timing of project start-up and implementation.* The usual questions for evaluation are: Was there an unusual delay in the start-up? If so, what were the reasons and the possible repercussions for the project? Was the project able to complete the various activities within the stipulated times?
- *Services and inputs provided.* The adequacy of the supply of the services and inputs to be provided by the project. The main inputs of development projects fall into the following categories: physical infrastructure - quantity and quality of construction and whether it was completed when needed; the required timings of utilisation; the required inputs - volume, quality, and timely supply of inputs including project funding and materials/services and institutional building aspects i.e. the extent to which public and private institutions were developed or strengthened.

³¹ Project evaluation may be a once-only activity or it may be ongoing over a longer period i.e. the day-to-day process of learning from the experience of implementing the project so as to adjust project design during project implementation. In this Manual this ongoing evaluation is considered an internal project management responsibility which falls within the scope of project implementation monitoring. (Chapter 6).

- *Managerial performance.* The overall performance of the managers; were they able to manage and supervise project activities effectively? Did they establish necessary linkages with Governmental agencies and private organisations? Were they task-oriented? Were the human and material resources properly utilised?
- *Financial performance.* Financial outlays to be compared with the original costs and budgets to examine whether the financial targets and covenants in project agreements were fulfilled and whether in general there has been satisfactory financial control. How were cost overruns financed and underruns re-deployed?
- *Economic performance.* How does the economic performance at the point of evaluation compare with the economic evaluation undertaken at the time of project formulation?

Most of the information required for the evaluation of project performance is available within project documents, financial, and administrative records and secondary data available from the executing and implementing agencies. These may need to be supplemented by interviews with principal project staff and representatives of relevant institutions. If a satisfactory management information system has been set up; the required data will be readily available

7.2.3 Output, Effects, and Impacts

The second focus for the evaluation is on the output, effects, and impacts of the project. It will also include any environmental impacts other than those which were predicted at the time of project formulation. A review of performance alone fails to provide a firm basis for such an assessment. It is quite possible for all the activities and tasks expected of a project to be completed satisfactorily within the stipulated time and resources and yet not lead to the anticipated results. For example, service centres have been constructed and the feeder roads linking beneficiaries to these centres have been established, but the extension centres remained unused. On the other hand, participatory organisations have been established, but they may have failed. In each of these instances, an evaluation confined to project implementation based on the original intervention model alone, would conclude that the project had succeeded, although this would not have been the case. In development projects, as in other arenas of human endeavour, well-planned, sincerely executed efforts do not necessarily produce the desired results. When they are implemented, development projects generate multiple chain reactions that cannot always be anticipated. Some beneficiaries do benefit, but others may be displaced or disadvantaged by economic forces unleashed by the accrual of the initial benefits resulting from these chain reactions.

7.2.4 Economic and Financial Efficiency

One of the prime objectives of an evaluation is to determine the efficiency of the project by computing financial and economic rates of return on the funds invested in it. Such returns are estimated at the time of project formulation and appraisal on the basis of output models. The purpose of a re-computation is to determine, first, whether the original estimates proved to be realistic and, second, the reasons for and implications of any significant variations.

7.3 The Project Cycle and Types of Evaluations

7.3.1 General

Project evaluation is carried out at one or more of three stages of the project cycle:

- During implementation, when there is definite evidence that the project will not meet its objectives.
- At the end of implementation, when the project funding is in its final stages.
- Some years after the project's termination, when its long-term effects and impact are visible.

These are known as pre-project completion, terminal, and post-project evaluations. The distinction between pre-project completion and a terminal evaluation is not always clear when projects are funded in successive phases. In such cases, an evaluation can be construed as pre-project completion or terminal depending on its recommendations. If the recommendation is to undertake a major redesign that will lead to a radically different second phase, the evaluation might be regarded as the terminal one of the first phase. The distinction and nomenclature are often semantic.

7.3.2 Pre-project Completion Evaluation

A pre-project completion evaluation is carried out during project implementation. It is often a result of the project not meeting its development objectives. The distinction from later evaluations is that corrections to the current project still can be made on the basis of its findings and recommendations. The primary focus of a pre-project completion evaluation is on project performance. That is,:

- Organisational structure and management capabilities, progress and problems in staff recruitment and placement, ability to get such necessary resources as office space and transportation for project staff, and establishment of organisational linkages with various Governmental agencies and organisations.
- Procurement and payment of the necessary goods and services from national and international sources (in many projects, procurement/payment delays become a major obstacle to effective project implementation).
- Progress in establishing delivery systems for supplying the necessary inputs and services to the target population.
- Progress in building physical infrastructure.
- Volume and quality of inputs and services.
- Initial response by the target population to the inputs and services.
- Preliminary indications about emerging outputs.
- Changes in the environment since appraisal which are likely to affect performance during the remaining implementation.

At this stage it will not be possible to assess the effects and impacts of the project. At best, the evaluation can critically examine if continuing validity of the assumptions on which the projections of likely impact were based and, if necessary, amend these in the light of developing circumstances. Well-considered pre-project completion evaluations can lead to suitable modifications in project design or strategies, and they can be instrumental in:

- changing the nature of the inputs and services;
- in modifying the intervention approach; and/or

- shifting the emphasis among target groups.

7.3.3 Project Completion Evaluation

A project completion evaluation is conducted when the funding for the project comes to an end, although that does not mean that the services and inputs being supplied by the project cease. In most cases it is assumed that the services will be institutionalised within the system.

The scope of a project completion evaluation is broader than that of a pre-project completion evaluation because, firstly, the longer time available for review should facilitate a reasonable assessment of the initial outputs and effects and secondly, the completion of funding requires a careful examination of the performance in which all responsible parties are involved.

Furthermore, in most cases, the forecast of the impact of the project can most likely be improved on the basis of the evidence accumulated during the project implementation. Linked with the estimation of impact are two items which may be explored in project completion evaluations: the sustainability of the benefits accruing to the target population and the rates of return on investments.

A project completion evaluation needs to examine the sustainability of the benefits because once external funding ends many services and inputs are either discontinued or drastically reduced in quality or quantity. Relevant questions for a project completion evaluation include: What are the realistic prospects of sustaining the benefits in the long term? What would be the consequences for project impact if this does not happen? And what can be done about it? (It should, however, be noted that it is not always possible to obtain an accurate picture of the project's sustainability at this stage).

The rates of financial and economic returns calculated at the time of project completion evaluation should be more realistic and accurate than earlier estimates, because at least some of the data required for the calculation are known with reasonable accuracy.

To search out the most relevant data, the project completion evaluation should review a wide range of data and information gathered from various sources. In addition to the project records, documents, and outputs of the management information system, a search should be made for secondary data that are relevant for a comparison. If necessary, the project completion evaluation should include studies of the beneficiaries' perceptions of the project's benefits and of the impact on their lives.

The recommendations for a project completion evaluation, unlike those of a pre-project completion evaluation, are primarily meant to improve the planning and design of future projects. In some cases, the future projects may be a second phase of the one under evaluation, in which case the lessons learned have a direct relevance.

7.3.4 Post Project Evaluation

Post project evaluation is often referred to as "impact evaluations" or ex-post evaluations. Post project evaluation is designed as in-depth studies of the impact of an intervention and are usually carried out some years after completion of its funded implementation. There are two reasons for conducting ex-post evaluations. Firstly, as stated above, much of the lasting impact will not be visible at the time the project comes to an end i.e. at project commissioning. Second, such impact as is detected at the time of the project completion evaluation might prove

transitory. Not uncommonly, development projects which show promising gains in the early years of their operations fail to sustain the gains in the long term.

7.4 Criteria for Undertaking Project Evaluation

There are normally three institutions which would advise the Government to undertake project evaluations:

- Development Partner/Donor (financing major part of the project)
- EPPD
- BFPD

Development Partner/Donor

The donor financing major part of the project would normally stipulate the required project evaluations to be undertaken in the Memorandum of Understanding signed between the Government and the donor. As the aim of the related evaluations would be the same for the Government and the respective donor, it would be appropriate to undertake joint project evaluations. This would mean the preparation of joint TOR for the respective project evaluations and ensure that Government representatives are members of the evaluation team.

EPPD

As the Project Appraisal Report prepared by EPPD may stipulate project evaluation(s) at certain stages of the project cycle, EPPD may advise CDC on the scope and nature of project evaluations as well as whether the evaluation should be carried out by an ad hoc committee or whether the evaluation should be carried out by an independent entity.

BFPD

As BFPD is the responsible agency for the overall project implementation monitoring *vis a vis* CDC, BFPD is responsible for proposing the need to undertake project evaluations including the scope and nature project evaluations to CDC. This would include a recommendation on whether the evaluation could be carried out by an ad hoc committee or whether the evaluation should be carried out by an independent entity.

Comments

On the above background it would, as a point of departure, be appropriate to undertake joint project evaluations with the respective donors and ensure that Government representatives are members of the evaluation team. In case this approach cannot be institutionalised, it would be advisable to follow the above Government criteria to initiate separate project evaluations and proceed accordingly.

7.5 Institutional Responsibility

At the completion of a joint evaluation, EPPD is to prepare a Memorandum (Annex 19) attaching the evaluation report for submission to CDC.

If joint project evaluations cannot be carried, the roles and responsibilities of Government Agencies/Committees for project evaluations are as follows:

- i. EPPD to advise the CDC on project evaluations on the basis of the related proposals made in the Project Appraisal Report.

- ii. BFPD to advise, as part of its reporting responsibility on project implementation progress, on the scope and nature of project evaluation to CDC (through the CDC Secretariat).
- iii. Decision whether project evaluation should be carried out by an ad hoc committee (including its composition)³² or by a completely independent body would rest with the CDC.

At the completion of a Project Evaluation, EPPD is to prepare Memorandum (Annex 19) attaching a copy of the project evaluation report for submission to CDC.

³² EPPD to act as the secretariat

Evaluation Report on Project: (Title or Name)

The focus and structure of a project evaluation report depends on whether the evaluation addresses the project during implementation. i.e. pre-project completion (PPE), at project completion i.e. Project Completion Evaluation (PCE) or after the project has been operational for some time i.e. Post-Project Evaluation (PPE). Bearing in mind these stages of project evaluation, the outline of a project evaluation given below can, together with the outline given in Chapter 7, be used as a guideline. At the end of this Annex 15 is given a guideline format for a project evaluation report (Annex 16)

1. The Project

- *Project title*
- *Stage of project evaluation*

2. Project Performance

As evaluation of the performance of the project is a comprehensive, retrospective look at the project from its inception to the time of the evaluation. In this context, the orientation and focus of the evaluation should be on the project during implementation. i.e. pre-completion or at the stage when the project has been completed i.e. project completion.

- **Project Identification, Formulation and Appraisal**

A review of how the project was identified, the quality of the PCN (Annex 3), the Project Proposal (Annex 6) and the feasibility studies undertaken, the commitment and the capability of the executing/implementation agencies and the adequacy of the Project Appraisal (Annex 8).

- **Project Specification**

A review of the objectives, components, activities, targets, assumptions and underlying intervention models. Specific questions which an evaluation seeks to answer are: How were the project's objectives determined? Were they consistent with national goals? Were the project components and strategies adequate to achieve the targets? Were the targets realistic? Was the intervention model basically sound?

- **Timing of Project Start-up and Implementation**

The usual questions for evaluation are: Was there an unusual delay in the start-up? If so, what were the reasons and the possible repercussions for the project? Was the project able to complete the various activities within the stipulated times.

- **Services and Inputs Provided**

A review of the adequacy of the supply of the services and inputs to be provided by the project. The main inputs of development projects fall into the following categories: physical infrastructure – quantity and quality of construction and whether it was completed when needed, the required timings of utilization, the required inputs – materials/services and institution building aspects i.e. the

extent to which public and private institution building aspects i.e. the extent to which public and private institutions were developed or strengthened.

- **Managerial Performance**

A review of the overall performance of the managers; were they able to manage and supervise project activities effectively? Did they establish necessary linkages with Governmental agencies and private organisations e.g. through the PStC? Were they task-oriented? Were the human and material resources properly utilized?

- **Financial Performance**

A review of the financial outlays to be compared with the original costs and budgets to examine whether the financial targets and covenants in project agreements were fulfilled and whether, in general, there was satisfactory financial control. How were cost overruns financed and underruns re-deployed.

- **Economic Performance**

How does the economic performance at the point of evaluation compare with the economic evaluation undertaken at the time of project formulation?

3. Outputs, Effects and Impacts

This Section focuses on whether the project has reached the development objectives which the project was set out to reach at the inception. In this context the orientation of the evaluation structure towards the outputs, the effects and the impacts which the project has (or has not) achieved in a sustainable manner after the project has been operational for some time.

4. Economic and Financial Efficiency

This Section deals with the re-computation of the medium to long term economic and financial rate of return on the funds invested in the project.³³ In this context, the orientation should be towards the long-term sustainability of the project.

³³ In case project formulation has been based on cost effectiveness analysis rather than cost-benefit analysis, this Section should reflect the cost effectiveness of the project accordingly.

Evaluation Team use only

Annex 18

Appraisal of Evaluation Report on Project: (Title or Name)

CDC Paper Number

Executive Summary of Conclusions and Recommendations (4-6 pages)

1. Introduction

- *Background of the evaluation*
- *Brief description of the project*
- *Evaluation methodology including the general approach and main sources of data, professional profile of evaluation team and limitations associated with methodology and approach*
- *Structure of report*

2. Project Relevance

- *Rationale and context of the project at its inception*
- *Changes to project context during implementation*
- *Relevance of project in relation to development priorities (at the time of evaluation and in relation to priorities at various levels – national, regional, district and local levels)*

3. Efficiency

- *Project progress compared to plans*
- *Costs and utilization of resources compared to budget and plans*
- *Achievement of results*
- *Results in relation to resource utilization*

4. Effectiveness

- *Expected achievement of objectives when the project was designed*
- *Actual or expected achievement of objectives at the time of evaluation*
- *Factors and processes affecting achievement of objectives*

5. Impact of the Project

- *Local priorities, needs and demands*
- *Foreseen and unforeseen impact on target groups and other affected parties*
- *Foreseen and unforeseen impact on institutional levels*
- *Other major impacts of the project*
- *Factors and processes which explain project impacts*

6. Sustainability

- *The extent to which the project is/will become sustainable*
- *Factors affecting sustainability (political, institutional, economic and financial, technological, socio-cultural and environmental)*

7. Issues and Lessons learned

- *Operational issues and lessons learned (related to the project itself)*
- *Developmental issues and lessons learned (related to the social consequences of the project)*

8. Conclusion and Recommendations

- *Conclusion (facts)*
- *Recommendations (future)*

CDC Secretariat (EPPD) use only

Annex 19

CDC Paper Number

Memorandum on Project Evaluation of Project for Cabinet Development Committee

Salient Project Features

1. *Projective Objective(s):*
2. *Original Costs:*
3. *Latest Approved Cost: (date)*
4. *Original External Funding Approved: (date)*
5. *Latest External Funding Approved: (date)*
6. *Original FIRR and EIRR: (date)*
7. *Latest FIRR and EIRR: (date)*
8. *Donor:*
9. *Highlights of the Evaluation*
10. *Recommendations:*

The Memorandum is an assessment of the project evaluation report prepared by the evaluation team. The Memorandum to be prepared by EPPD and submitted to CDC for consideration.

Annex 20: Ongoing Capital Investment Projects

Sector/Project Title	CDC ref no. including date	ACC ref no. including date	Executing Agency	Implementing Agency	Costs (SAT\$ mill.)		External Capital Funding (SAT\$ mill.)		Status (% of physical completion)	Donor
					Originally Approved	Latest Approval	Originally Approved	Latest Approval		
Economic Sector										
E-1(Project Title)										
E-2										
E-3										
etc.										
Infrastructure Sector										
I-1 (Project Title)										
I-2										
I-3										
etc.										
Social Sector										
S-1 (Project Title)										
S-2										
S-3										
etc.										
Other										
O-1										
O-2										
O-3										
etc.										

Annex 21: Ongoing Technical Assistance Projects

Sector/Project Title	CDC ref no. including date	ACC ref no. including date	Executing Agency	Implementing Agency	Costs (SAT\$ mill.)		External Capital Funding (SAT\$ mill.)		Status (% of physical completion)	Donor
					Originally Approved	Latest Approval	Originally Approved	Latest Approval		
Economic Sector										
E-1(Project Title)										
E-2										
E-3										
etc.										
Infrastructure Sector										
I-1 (Project Title)										
I-2										
I-3										
etc.										
Social Sector										
S-1 (Project Title)										
S-2										
S-3										
etc.										
Other										
O-1										
O-2										
O-3										
etc.										

Annex 22: Ongoing Human Resource Development Projects

Sector/Project Title	CDC ref no. including date	ACC ref no. including date	Executing Agency	Implementing Agency	Costs (SAT\$ mill.)		External Capital Funding (SAT\$ mill.)		Status (% of physical completion)	Donor
					Originally Approved	Latest Approval	Originally Approved	Latest Approval		
Economic Sector										
E-1(Project Title)										
E-2										
E-3										
etc.										
Infrastructure Sector										
I-1 (Project Title)										
I-2										
I-3										
etc.										
Social Sector										
S-1 (Project Title)										
S-2										
S-3										
etc.										
Other										
O-1										
O-2										
O-3										
etc.										

Annex 23: Pipeline of Capital Investment Projects

Sector/Project Title	Date of Submission	Executing Agency	Estimated Costs (SAT\$ mill.)		External Capital Funding Required (SAT\$ mill.)	Status ³⁴	Potential Donor
			Capital	Recurrent ³⁵			
Economic Sector							
E-1(Project Title)							
E-2							
E-3							
etc.							
Infrastructure Sector							
I-1 (Project Title)							
I-2							
I-3							
etc.							
Social Sector							
S-1 (Project Title)							
S-2							
S-3							
etc.							
Other							
O-1							
O-2							
O-3							
etc.							

³⁴ Legend

1. Pre-appraised project by EPPD
2. Appraised by Sub-Committee of ACC.
3. Appraised/CDC approved project.

³⁵ Recurrent costs are referred to as the operating costs after the project has been commissioned and entered into its operational phase. Recurrent costs in this context refer to costs which are expected/required to be funded through the annual budget.

Annex 24: Pipeline of Technical Assistance Projects

Sector/Project Title	Date of Submission	Executing Agency	Estimated Costs (SAT\$ mill.)		External Funding Required (SAT\$ mill.)	Status ³⁶	Potential Donor
			Total	Recurrent ³⁷			
Economic Sector							
E-1(Project Title)							
E-2							
E-3							
etc.							
Infrastructure Sector							
I-1 (Project Title)							
I-2							
I-3							
etc.							
Social Sector							
S-1 (Project Title)							
S-2							
S-3							
etc.							
Other							
O-1							
O-2							
O-3							
etc.							

³⁶ Legend

4. Pre-appraised project by EPPD
5. Appraised by Sub-Committee of ACC.
6. Appraised/CDC approved project.

³⁷ Recurrent costs are referred to as the operating costs after the project has been commissioned and entered into its operational phase. Recurrent costs in this context refer to costs which are expected/required to be funded through the annual budget.

Annex 25: Pipeline of Human Resource Development Projects

Sector/Project Title	Date of Submission	Executing Agency	Estimated Costs (SAT\$ mill.)		External Funding Required (SAT\$ mill.)	Status ³⁸	Potential Donor
			Total	Recurrent ³⁹			
Economic Sector							
E-1(Project Title)							
E-2							
E-3							
etc.							
Infrastructure Sector							
I-1 (Project Title)							
I-2							
I-3							
etc.							
Social Sector							
S-1 (Project Title)							
S-2							
S-3							
etc.							
Other							
O-1							
O-2							
O-3							
etc.							

³⁸ Legend

7. Pre-appraised project by EPPD
8. Appraised by Sub-Committee of ACC.
9. Appraised/CDC approved project.

³⁹ Recurrent costs are referred to as the operating costs after the project has been commissioned and entered into its operational phase. Recurrent costs in this context refer to costs which are expected/required to be funded through the annual budget.

Annex 26: Capital Investment Scheduling of Ongoing Projects

Budget Year	Start/Finish	20../... ¹			20../....			20../....		
Sector		Local	External	Total	Local	External	Total	Local	External	Total
Economic Sector										
E-1(Project Title)										
E-2										
etc.										
Total Economic Sector										
Infrastructure Sector										
I-1 (Project Title)										
I-2										
etc.										
Total Infrastructure Sector										
Social Sector										
S-1 (Project Title)										
S-2										
etc.										
Total Social Sector										
Other										
O-1										
O-2										
etc.										
Total Other										
Total Ongoing Projects										

¹ forthcoming budget year

Annex 27: Capital Investment Scheduling of Pipeline of Projects

Budget Year	Start/Finish		20../...			20../....			20../....		
Sector		Status ¹	Local ²	External ²	Total ²	Local	External	Total	Local	External	Total
Economic Sector											
E-1(Project Title)											
E-2											
etc.											
Total Economic Sector											
Infrastructure Sector											
I-1 (Project Title)											
I-2											
etc.											
Total Infrastructure Sector											
Social Sector											
S-1 (Project Title)											
S-2											
etc.											
Total Social S											
Other											
O-1											
O-2											
O-3											
Total Other											
Total Pipeline of Projects											

¹ Legend

1. Pre-appraised projects by EPPD
2. Appraised by Sub-Committee of ACC
3. Appraised/CDC approved projects
- 4.

² Normally, Local/External costs are on a 10 to 90 ratio basis, (every case has to be judged on a “case to case” basis.)

Appendix 1

The Logical Framework Step by Step

1. General

On the basis of the Logical Framework (LF) given in Chapter 2; Appendix 1 sets out to apply the LF by means of a workshop.

In this perspective Appendix 1 provides the following step by step approach:

- i. General framework of the LF workshop
- ii. Visualising techniques to be adopted
- iii. LF step by step
 - Step 1: Participation Analysis
 - Step 2: Problem Analysis
 - Step 3: Objectives Analysis
 - Step 4: Alternative Analysis
 - Step 5: Identifying Main Project Elements in the PMatrix
 - Step 6: Identifying Assumptions in the PMatrix
 - Step 7: Identify Indicators in the PMatrix
- iv. The Project Matrix (PMatrix)

2. The LF Workshop

The LF workshop is a major instrument for project planning and analysis. It can be organised in different ways.

In its simplest form it can be a brief, internal exercise carried out at an early stage for the purpose of deciding whether or not to continue planning the project. Or it can be more extensive, depending upon whether the project is new or ongoing; a simple limited concept or a complex integrated one.

The more extensive LF workshop would typically last from 6 to 12 days and preferably be carried out in the project area with participants from all parties involved.

Participants at the LF workshop would typically consist of representatives of affected/involved organisations and institutions and relevant specialists. Future co-operation is likely to be smoother and more productive if all those involved have developed the project design jointly and have agreed on the objectives.

Representatives of the intended beneficiaries should be involved, either directly in the workshop, or indirectly through simplified workshops using adapted communication means where they can express their opinions and priorities.

The workshop should be facilitated by a LF specialist, but the facilitator should preferably be independent of the agencies and interested parties involved.

3. Visualising Techniques

Visualisations is used in the LF workshop to make thinking, discussion and work process as efficient as possible. The visualising technique makes extensive use of coloured cards to display and analyse opinions. The main principle is that all contributions made by the workshop participants would immediately be written down on cards and pinned to the wall for everyone to see. In this way discussions are rationalised and deepened, and results are gradually improved.

Ten practical rules concerning the visualising technique are:

- i. Be positive: formulate all suggestions on the cards and avoid time-consuming arguments.
- ii. Only one statement per card, clearly written and brief.
- iii. Word the messages clearly and distinctly: Stick to facts, avoid speculation or stereotypes and unclear abbreviations.
- iv. The facilitator helps the participants organise their suggestions, the cards and chairs the discussions
- v. A facilitator's involvement in discussions should be limited to aspects related to LP methodology. The facilitator should refrain from getting involved in substantive discussions.
- vi. Cards with general statements should be replaced by several more specific cards.
- vii. Statements can be changed or moved temporarily by the facilitator when requested by the participants.
- viii. Statements can be changed or moved permanently only when all the participants agree.
- ix. If discussions become lengthy or unproductive, they should be temporarily discontinued. The team should then proceed with other aspects of the problem.
- x. Lines indicating causal relationships should not be drawn until the end of the session.

4. LF step by step

4.1 General

A LF workshop focuses on key aspects of an existing problem situation.

The comprehensiveness of the planning exercise will be determined by the:

- Amount of information available.
- Complexity of the problems to be handled.
- Number and capability of the participants.

The point of departure for a LF workshop should be a paper describing current problems in the project area, e.g. a Project Concept Note (PCN) or an information paper compiled specifically for this purpose.

Such information should be available to the participants before the LF workshop starts.

Relevant information on the various interest groups, their needs, socio-cultural situation etc., should also be available.

The analysis to be conducted in four consecutive steps, identifying the most direct and essential causal relationships followed by three planning steps in which the project is designed. These steps are summarised and described in detail in subsequent pages.

ANALYSING THE SITUATION

Step 1: Participation Analysis

Step 2: Problem Analysis

Step 3: Objectives Analysis

Step 4: Alternative Analysis

DESIGNING THE PROJECT

Step 5: Identification Main Project Elements in the PMatrix

Step 6: Identification Assumptions in the PMatrix

Step 7: Identification of Indicators in the PMatrix

4.2 Step 1: Participation Analysis

Lack of knowledge among development planners about the people affected by development projects has proved to be the common cause of project problems. This has been evidenced in numerous evaluation reports and studies.

As the first step, a comprehensive picture of the interest groups, the individuals and institutions involved has to be developed.

Organisations, authorities at different levels and interest groups have different motives and interests. It is of fundamental importance to analyse the interests and expectations of the various participants both early on in the planning process and later during the implementation of the project.

A fundamental requirement of all development projects is that the objectives reflect the needs of the society and the interest groups which are likely to be affected by a possible development project in the area, positively or negatively, directly or indirectly.

In order to deepen the analysis, the individual participants in the workshop could be assigned to represent the positions of different groups during the working sessions.

Furthermore, it is important that the participants in the LF workshop are able to agree on whose interests and views are to be given priority when the analysis of problems is carried out (Step 2).

Relevant issues to have in mind are:

- Which are the target-groups most in need of assistance?
- Which target-groups should be supported in order to ensure positive development?
- What conflicts would occur by supporting given target-groups and what measures can be taken to avoid such conflicts?

4.3 Step 2: Problem Analysis

4.3.1 General

On the basis of available information, the existing situation is analysed i.e. the major problems are identified and the main casual relationships between these are visualised in a problem tree.

The mandate of the LF workshop may often be restricted to one specific sector, subsector, area, etc. In other cases, the workshop is conducted in connection with one particular ongoing project.

It is important that all possible options remain open during the problem analysis. The aim at this early stage is to establish an overview of the situation. Later in the process, the perspective will be narrowed and deepened in order to prepare for the design of the project.

FORMULATE PROBLEMS

1. Identify existing problems- not possible, imagined or future ones
2. A problem is not the absence of a solution- but an existing negative state

Example:

No pesticides are available

Wrong

Crop is infested with pests

Right

3. Only one problem per card.

4.3.2 Identifying a Starting Point

Each participant writes down a suggestion as one focal problem i.e. describes what he/she considers the central point of the overall problem.

The theme guiding discussion and selection of the focal problem is the interests and problems of the interest groups, persons and institutions involved.

The workshop should then discuss each proposal and try to agree on one focal problem.

If agreement cannot be reached, then:

- arrange the proposed problems in a problem tree, according to the causal relations between them, and
- try again to agree on the focal problem on the basis of the overview achieved in this way.

If still no consensus is achieved, then:

- try brainstorming, role games or other decision-making aids,
- select the best decision (e.g.) by awarding points, or
- decide temporarily on one, continue work but return to discuss the alternative focal problems.

Whenever possible, avoid formal voting to obtain a majority decision.

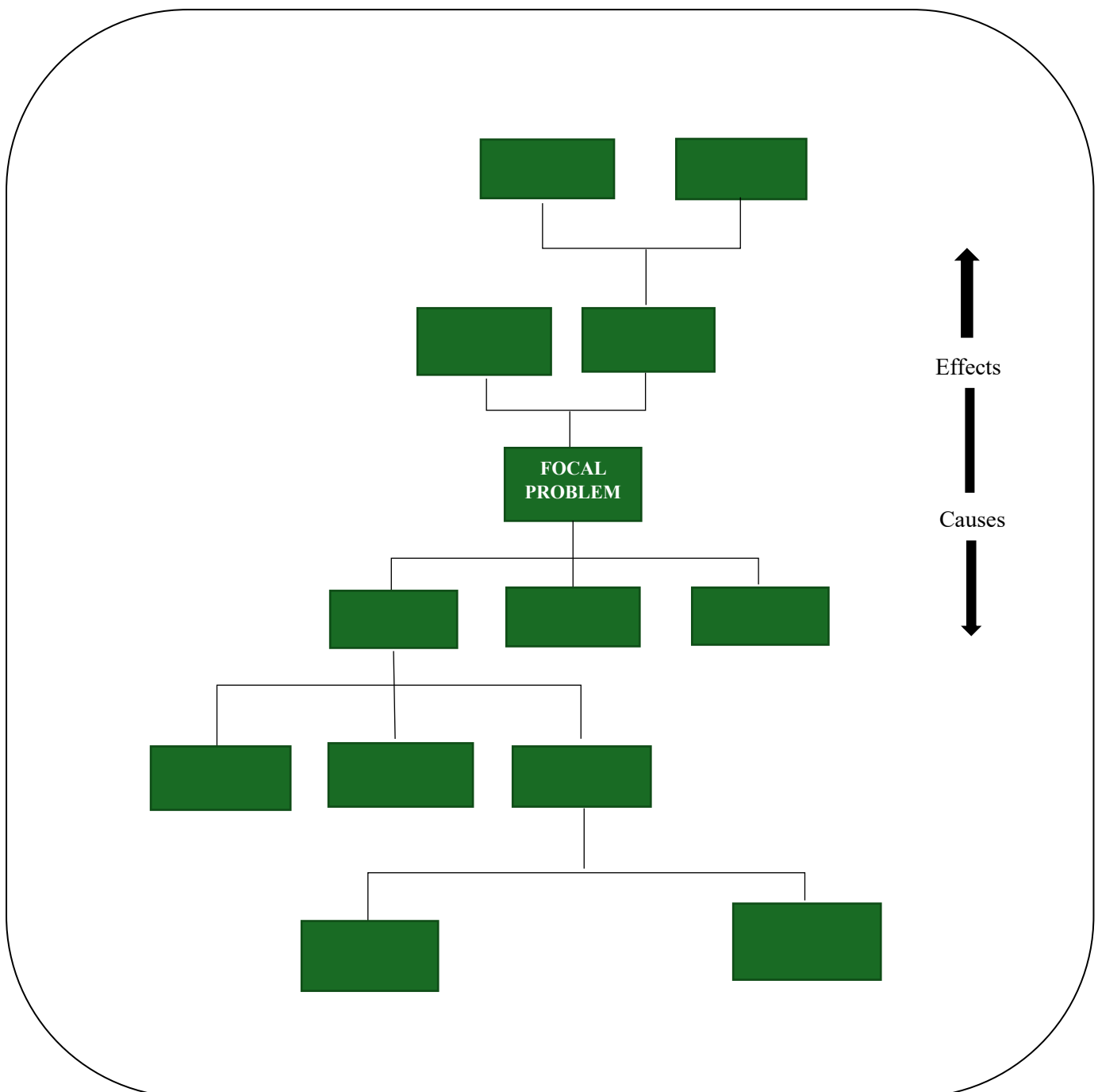
SELECT A STARTING POINT

1. Identify major existing problems, based upon available information (brainstorming)
2. Select one focal problem for the analysis

4.3.3 Developing the problem tree

The substantial and direct causes of the focal problem are placed parallel underneath it. The substantial and direct effects of the focal problem are placed parallel on the line above it.

Causes and effects are further developed along the same principle to form the problem tree.



The problem analysis can be concluded when the participants are convinced that all essential information has been included in the network in order to explain the main cause-effect relationships characterising the problem.

DEVELOP THE PROBLEM TREE

1. Identify substantial and direct causes of the focal problem
2. Identify substantial and direct effects of the focal problem
3. Construct a problem tree showing the cause and effect relationships between the problems
4. Review the problem tree, verify its validity and completeness, and make necessary adjustments.

4.4 Step 3: Objectives Analysis

4.4.1 Developing the Objectives Tree

The purpose of objective analysis is to evaluate information or data without bias or personal opinion. It involves examining facts, evidence, and data in a logical and systematic way to reach a conclusion based on the information

Working from the top downwards, all problems are reworded, making them into objectives (positive statements).

- the focal problem is similarly transformed into an objective and is no longer highlighted
- difficulties in rewording may be solved by clarifying the original problem statement

If the statements make no sense after being reworded from problems, write a replacement objective, or leave the problem unchanged.

Check that meeting objectives at one level are sufficient to achieve the objective at the next level.

Problem: "if cause A, then effect B"

Objectives: "means X in order to achieve end Y"

Caution: every cause-effect relationship does not automatically become means-ends relationships.

Finally, draw lines to indicate the means-ends relationships in the objectives tree.

DEVELOP THE OBJECTIVES TREE

1. Reformulate all elements in the problem tree into positive, desirable conditions.
2. Review the resulting means-ends relationships to assure validity and completeness of the objective tree.
3. If necessary:
 - Revise statements
 - Delete objectives which appear unrealistic or unnecessary
 - Add new objectives where necessary
4. Draw connecting lines to indicate the means-ends relationships.

4.5 Step 4: Alternatives Analysis

4.5.1 Selecting the Alternatives

The purpose of the alternatives analysis is to identify possible alternative options, assess the feasibility of these and agree upon one project strategy.

Possible alternative means-ends branches in the objectives tree which could become possible projects are identified and circled out. These means-ends branches constitute the alternative options.

Alternative options are numbered or labelled, e.g. "production approach", "income approach", "training approach", etc.

Referring to the results from the participation analysis (step 1), the participants should then discuss the alternative options in the light of which target-groups would be affected by them and in which ways.

IDENTIFY ALTERNATIVE OPTIONS

1. Identify differing "means-ends" ladders, as possible alternative options or project components.
2. Eliminate objectives which are obviously not desirable or achievable.
- 3 Eliminate objectives which are pursued by other projects in the area.
4. Discuss the implications for affected groups.

4.5.2 Selecting the Most Viable Alternative

The alternative options should be considered in relation to the following criteria:

Total cost
Benefits to priority groups
Probability of achieving objectives
Social risks or costs
Environmental effects or costs

The workshop participants should also agree on any other criteria to use when assessing the viability of alternative options.

Possible criteria could be:

Technical: Appropriate use of local resources, market suitability etc.
Financial: Costs, financial sustainability, foreign exchange needs, etc.
Economic: Economic return, cost effectiveness, etc.
Institutional: Capacity, capability, technical assistance
Social/distributional: Distribution of costs and benefits, gender issues, socio-cultural constraints, local involvement and motivation, etc.
Environmental: Environmental effects, environmental costs versus benefits

The planning team should consider the different criteria in relation to the alternative options and make rough assessments, e.g. high/low, +/-, extensive/limited.

Based on these findings, the planning team should agree on one project strategy.

SELECT THE PROJECT STRATEGY

5. Make an assessment of the feasibility of the different alternatives.
6. Select one of the alternatives as the project strategy.
7. If agreement cannot be directly reached, then:

Introduce additional criteria, or;

Alter the most promising option by including or subtracting elements from the objectives tree.

4.6 Step 5: Identifying Main Project Elements in the PMatrix

Once the project strategy has been chosen, the main project elements are derived from the objectives tree and transferred into the first vertical column of the Project Matrix (PMatrix) (see page)

Start at the top and work downwards

Decide on one development objective and one immediate objective

If necessary, reformulate the wording from the objectives tree to make them more accurate

The goal describes the anticipated long-term objective towards which the project will contribute (project justification)

Note: There should be only one immediate objective.

The outputs are expressed as objectives which the project management must achieve and sustain within the life of the project. Their combined impact should be sufficient to achieve the immediate objective.

Note: While the project management should be able to guarantee the project outputs, the immediate objective is beyond their direct control.

Activities are expressed as processes.

Avoid the detailing of activities, indicate the basic structure and strategy of the project.

All outputs should be numbered. Each activity should then be numbered relating it to the corresponding output.

Main inputs are expressed in terms of funds, personnel and goods.

DEFINE THE MAIN PROJECT ELEMENTS:

1. Goal
2. Purpose
3. Outputs
4. Activities
5. Inputs

4.7 Step 6: Identifying the Assumptions in PMatrix

4.7.1 Identifying the Assumptions

Assumptions describe conditions that must exist if the project is to succeed but which are outside the direct control of the project management.

Start from the bottom and work upwards.

Examine whether the inputs are sufficient to undertake the anticipated activities or whether additional events must also take place outside the project (assumptions).

Some assumptions can be derived from elements in the objectives tree which were not incorporated into the project.

Identify assumptions at each level in the matrix up to the development objective level.

Starting from the bottom, verify all levels that the proposals follow logically from each other and are complete. Each level must contain the necessary and sufficient conditions for the next level above (see page 12).

Make sure that the assumptions are described in such operational detail (with indicators if possible) that they can be monitored.

Examples of assumptions:

- fellowship recipients return to assigned positions
- local institutions collaborate in planning activities
- changes in world prices can be accommodated within given budget

IDENTIFY IMPORTANT ASSUMPTIONS

Assumptions:

1. can be derived from the objectives tree
2. are worded as positive conditions (see objectives)
3. are linked to the different levels in the PM
4. are weighted according to importance and probability

4.7.2 Checking the Assumptions

The significance of the assumptions should be assessed in order to indicate the chances of project success.

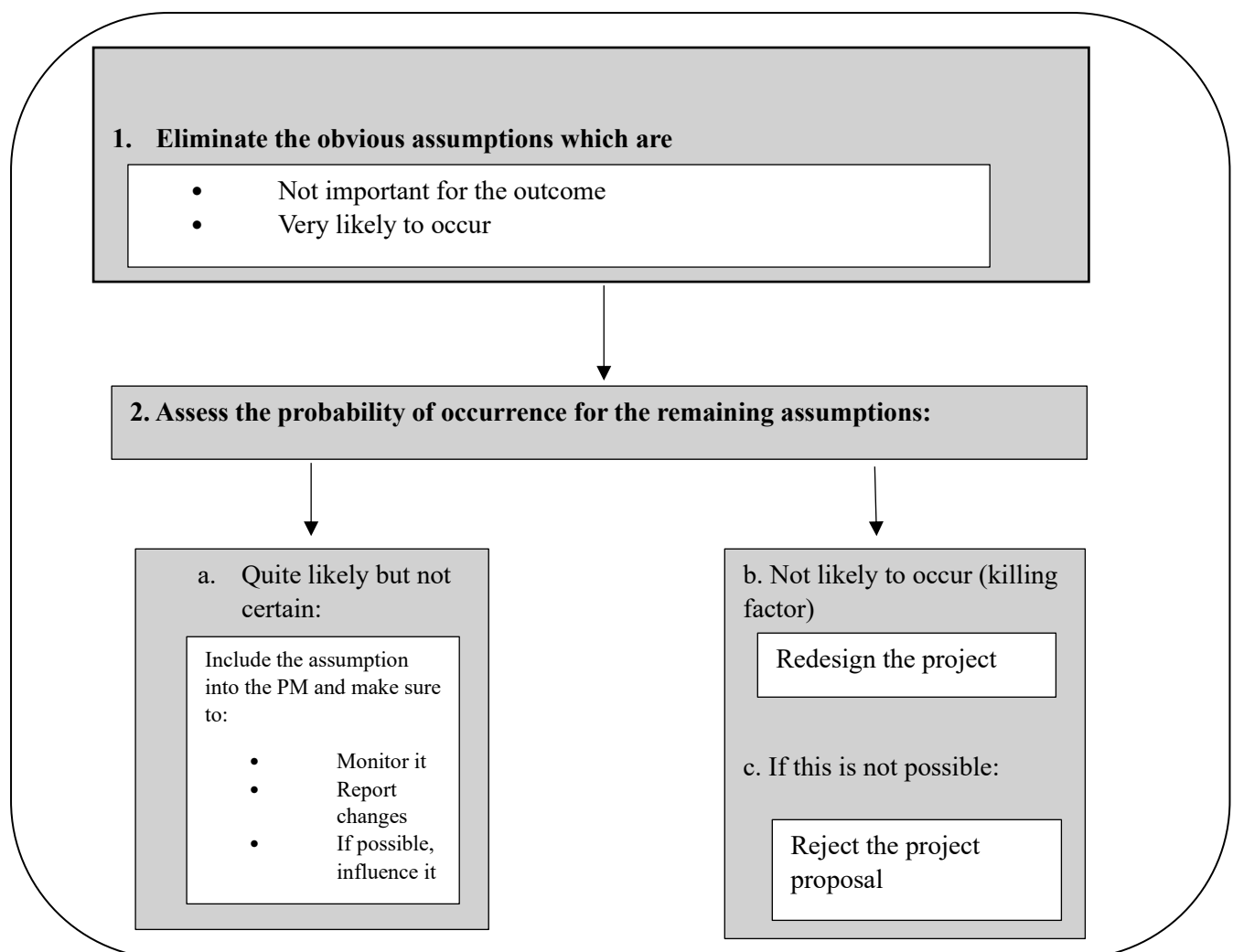
Go through the list of assumptions one by one at each level of the Matrix and check its importance and probability.

Assumptions which are either very likely to occur or not very important for the outcome of the project should be deleted.

If the participant in the LF workshop determine that an assumption is both very important for the outcome but not likely to occur, then it is a killing factor. If killing factors are found, the project must either be changed to avoid these factors or the project must be abandoned.

Goal	←	Assumptions
Purpose	←	Assumptions
Outputs	←	Assumptions
Activities	←	Assumptions

Each level in the PMatrix must contain the necessary and sufficient conditions for the next level above.



4.8 Step 7: Identifying the Indicators in the PMatrix

4.8.1 General

Indicators are specified in the second column in the PMatrix.

The details of the indicators determine how we can measure to what extent the objectives have been achieved at different times. Measurements can be:

- Quantitative, e.g. kilometres of rehabilitated roads
- Qualitative, e.g. farmers' co-operative functioning effectively
- Behavioural, e.g. increased use of sanitary facilities.

Qualitative indicators should be made measurable as far as possible.

Direct indicators may need to be supplemented by additional indirect (proxy) indicators.

Example of direct and indirect (proxy) indicators:

PURPOSE	DIRECT INDICATOR	INDIRECT INDICATOR
Increase income of small farmers	Crop Sales	<ul style="list-style-type: none">• Purchase of typical consumer items• Tin roofs on house
PURPOSE	DIRECT INDICATOR	INDIRECT INDICATOR
Increase income of small farmers	Crop Sales	<ul style="list-style-type: none">• Purchase of typical consumer items• Tin roofs on house

Several indicators are better than one. Single indicators seldom convey a comprehensive picture of change.

DEFINE HOW TO VERIFY THE ATTAINMENT OF OBJECTIVES

In the context of LFA, indicators specify the performance standard to be reached in order to achieve the goal, the purpose and the outputs.

Indicators should specify:

- Target group (for whom)
- Quantity (how much)
- Quality (how well)
- Time (by when)
- Location (where)

Indicators provide a basis for monitoring and evaluation

4.8.2 Formulating the Indicator

A good indicator is:

- substantial, i.e. it reflects an essential aspect of an objective in precise terms.
- independent, at the different levels. Since development and immediate objectives will be different, and each indicator is expected to reflect evidence of achievement, the same indicator cannot normally be used for more than one objective.
- factual, each indicator should reflect fact rather than subjective impression. It should have the same meaning for project supporters and to informed sceptics
- plausible, i.e. the changes recorded can be directly attributed to the project.
- based on obtainable data. Indicators should draw upon data that is readily available or that can be collected with reasonable extra effort as part of the administration of the project.

The measures provided by indicators should ideally be accurate enough to make the indicator "objectively verifiable" when different persons using the same measuring process independently of one another obtain the same measurements.

In the early planning stages indicators are just guiding values with which to analyse the project concept. These guiding values must be reviewed again when the project becomes operational, and where necessary replaced by project-specific indicators.

FORMULATE THE INDICATOR

Objective: Increase agricultural production

1. Identify indicator:
 - e.g. increase taro yield
2. Specify target group:
 - male and female smallholders (cultivating 3 acres or less)
3. Quantify:
 - 500 smallholders increase production by 50%
4. Set quality:
 - maintaining same quality of harvest as 19. Crops
5. Specify time frame:
 - between October 19.... and October 19...
6. Set location:
 - target district

4.8.3 Checking the means of verification

When indicators are formulated, the sources of information necessary to use them should be specific i.e.:

- what information is to be made available
- in what form; and
- who should provide the information

Sources outside the project should be assessed for accessibility, reliability and relevance.

The work and costs involved in any information to be produced by the project itself should also be assessed.

Indicators for which we cannot identify suitable means of verification must be replaced by other, verifiable indicators.

Indicators which after consideration of costs and usefulness, are found to be too expensive, must be replaced by simpler, cheaper indicators.

Formulating indicators should include specifying their means of verification. In many cases it may be useful to add a column for “means of verification” to the PMatrix.

CHECK THE USEFULNESS OF THE INDICATOR

1. Is the information available from existing sources (statistics, records, etc.)?
2. Is the information reliable and up-to-date?
3. Is special data-gathering required?
4. If so, do the benefits justify the costs?

Avoid costly and/or unreliable indicators.

5. The Project Matrix (PMatrix)

The matrix marks the end of the LF workshop and summarises the elements of the LF analysis in a matrix as shown below.

Figure 2.3: Logical Project Framework Matrix

Date of Preparing the Framework

Matrix:

Project Title:

Project Description:

Appendix 2

Framework for Economic Analysis⁴³

Introduction

The basis for a private investor to undertake an investment may differ from the basis of a government to undertake an investment. The decision to invest for a private investor is based upon the financial gains which the enterprise can be expected to achieve in the business environment within which it operates. A government is concerned with the economic wellbeing of its citizens and may have a broader reference for its decision to invest.

In the above context a private enterprise would normally look at an investment from the point of view of maximising its financial gains which the financial environment it operates. In doing so the private enterprise uses current market prices to value inputs purchased and outputs sold during the lifetime of the investment. This is referred to as “financial analysis” in which the cash flow is derived from the forecasted incomes and costs of the investment valued at current and expected future market prices. The internal rate of return (IRR) derived from such a marketplace cash flow is termed the “financial IRR”. The acceptable “financial IRR” for private sector investments depends on the interest rate of loans/credits from commercial banks to which the enterprise has access.

For public sector projects there is, in addition to the financial analysis, a need to carry out an analysis of the net benefits of the project to the economy as a whole. This latter is referred to as “economic analysis”, in which market prices are adjusted to reflect their underlying economic values to society. The reason for this is that in many developing countries, current market prices are often unreliable indicators of the real worth of goods and services to the society. This is due to distortions in the markets where these products are bought and sold.

Some of the important factors contributing to such distortions are as follows:

- i. Taxes and subsidies on goods in systems of monopoly production.
- ii. Ridged control of foreign exchange rate and supply of foreign currency by government (local currency is normally over-valued in relation to foreign currencies) particularly in situations of adverse balance of payments.
- iii. Protection of domestic markets through tariffs, quotas and trade taxes.
- iv. Government legislation and bargaining power of the labour force leading to a labour wage structure which is out of line with the true opportunity cost of labour.

Market prices are adjusted to economic values/prices using what are known as accounting prices, more commonly referred to as shadow prices. Shadow prices are introduced to reflect the true economic cost of project inputs and outputs to the society in order to give emphasis to those projects which contribute to government's efforts to achieve national development objectives.

Shadow prices of goods or services also known as National Economic Parameters, is thus measure of the real worth to the economy of a specific project.

⁴³ The Economic Analysis does not include social aspects such as income distribution, consumption versus investments etc.

It must be emphasised that although the result of an economic analysis might support a decision to implement a project proposal, appropriate measures will have to be taken to ensure that financial requirements for the operation of the project are met, particularly in respect of possible recurrent costs allocation through the annual budget.

The Methodology Employed

The methodology adopted for economic analysis is based on what is known as the “Little and Mirrlees”⁴⁴ methodology, modified by Squire and van der Tak⁴⁵. This methodology expresses all effects of a project at world market prices (also referred to as broader prices). The implication of this approach is that the net benefits of a project are made equivalent to a stream of economic benefits and costs valued at international market prices.

The justification of this approach is twofold. Firstly, it provides a common basis for valuing benefits and costs of project outputs and inputs. Secondly the use of world market prices is a measure of the opportunity cost to the economy of goods and services which can be bought and sold on the international market, referred to as “tradables”. This reflects the fact that if an economy is participating in world trade, then world market prices reflect the terms on which the economy can buy and sell goods and services on the world market. The rationale for this is that the world market price, especially for small countries like Samoa, is not affected by market imperfections within the country where the project is situated.

World market prices are free of domestic market distortions and the international prices thus reflect the economic value of goods and services. These opportunities for trade should be taken into account when assessing the investment possibilities to open to the economy. The methodology is open to all economies participating in the world trade but loses its relevance for autocratic or closed economies.

It is, however, obvious that in any economy there will be a significant number of commodities for which there will be no direct world market price to use as a measure of economic value, these are termed “non-tradables”. For these domestic prices it will therefore be necessary to develop a system to convert the current domestic market values of goods and services to economic values.

⁴⁴ Project Appraisal and Planning for Developing Countries (1974)

⁴⁵ Economic Analysis of Projects (1975)

Conversion of Financial Values to Economic Values

General

The first step on converting financial market values to economic values is to divide the inputs and outputs of a project into its traded and non-traded goods and services components. In addition, it is necessary to address project input factors such as land and labour as well as the factors of discount rate and foreign exchange rate as separate parameters in the economic analysis.

Furthermore, and before valuing traded and non-traded goods and services, it is necessary to isolate all transfer payment which appear in the financial analysis and exclude them from the economic analysis. Such payments include domestic taxes, import duties, subsidies and credit transactions. The rationale for excluding transfer payments from economic analysis is that a transfer payment does not represent the use of a real resource, but rather a transfer from one entity to another. It therefore plays no part in the economic resource allocation.

Traded Goods

Input

The cost to the society of importing an input is the value of the resources used in getting the input to the project. There are two components of this cost. The first is the border price of the input known as the CIF price (cost, insurance and freight) which is the overseas purchase price or cost. This price is converted into domestic currency at the official exchange rate. The second cost component is the local cost of transporting the goods from the port of entry to the project site. This cost component needs to be shadow-priced as a non-trade service.

Output

The benefit of a project output to society is the value of the new resources created. The first step in determining this value is to obtain the border price of the output. The border price of a traded output is its FOB price (free on board); assumed to be competitive on the world market. The true benefit to society is thus the border or FOB price converted at the official exchange rate if prices are denominated in foreign currency units.

Where a project produces import substitutes, a similar valuation procedure to that outlined above is to be followed. The benefit to society is the saving of not having to import the goods i.e. the CIF price plus possible transportation costs.

Non-Traded Goods

The most common non-traded goods and services include electricity, transportation, construction, labour and land. These can be both inputs and outputs to a project. Labour and land are primary factors of production and their economic evaluation must be treated separately to that of others. One way of carrying out the economic valuation of non-traded goods is to break down the composition of each non-traded good into traded and non-traded components until the stage is reached where the only non-traded component are labour and land.

This method of shadow pricing is tedious and time consuming and consequently rarely followed. Instead, non-traded goods are generally valued at economic process by the use of

conversion factors. A conversion factor is a short-cut method for converting prices of non-traded goods and services into border prices. At the most aggregate level a single conversion factor, the standard conversion factor (SCF) is used for this purpose. The SCF is derived by taking the ratio of all exports and imports at multiplying the SCF with the market prices. This reduces the market prices to their real economic value.

The formula for SCF⁴⁶ is:

$$\text{SCF} = \frac{M + X}{(M + D) + (X - T)}$$

Where M = value of imports at border prices

X = value of exports at border prices

D = total import duties

T = total export taxes

This approach of converting the financial market value of non-traded goods and services to economic values is considered to be the weakest link in the logical chain of establishing shadow prices. Many applied studies therefore treat non-traded goods and services very approximately.

Labour

General

Labour is a project input and like any other input it must be valued at its opportunity cost which may well differ from its market value. This opportunity cost, or economic value of labour, is equivalent to the output foregone elsewhere in the economy as a result of employing that labour in the project.

For economic project analysis in Samoa, two broad categories of labour should be shadow prices:

- i. Unskilled labour
- ii. Skilled labour

Unskilled Labour

Valuation of unskilled labour begins with an assessment of the degree of unemployed and/or underemployed of such labour. Where extensive unemployed and/or underemployment exist, the practice adopted is to take a fraction of the current wage rate as the shadow price of unskilled labour. The arbitrary figure of 50% of current market wage rate or the minimum wage rate is often selected as an estimate of the opportunity cost of labour. The only underlying argument for the selection of this arbitrary figure is that for economies with high rates of underemployment the opportunity cost will generally be significantly less than the market rate.

⁴⁶ It should be noted that the CF can also applied to individual or groups of traded goods and services i.e. converting the financial values of traded goods and services to economic values

Skilled Labour

In most instances skilled labour in developing countries is in short supply and would in all probability be fully employed without the project. As a result, wages paid to such personnel are generally taken as representing the true economic value to the society.

Land

In economic analysis land is valued at its opportunity cost which is its net value of production foregone when the use of land is changed from its “without project use” to its “with project use”.

In addressing this issue in a Samoa context, it is important to take account of the land ownership structure. Land in Samoa can be divided into categories:

- i. Customary land (the main bulk of land in Samoa)
- ii. Freehold land mainly held by Government and leased to the private sector

Customary land due to its nature of ownership is very seldom sold or leased to an entity outside the ownership structure in the villages. Customary land has thus no foregone value as it does not enter the economic sector.

Freehold land is available as leased land. It is recommended that the opportunity cost of freehold land is valued as the direct value of production foregone when the use of this land is changed from its “without – project use” to its “projects use”.

Foreign Exchange

The foreign exchange value of the SAT\$ is linked to a basket of six foreign currencies representing the six major trading partners of Samoa. There is therefore no reason to believe that the SAT\$ is significantly distorted and it would be fair to assume that the current official exchange rate of SAT\$ represents the opportunity cost of the exchange rate in Samoa. This judgement is further strengthened by the relatively satisfactory balance of payment situation in Samoa. This situation is linked to the inflow of foreign aid on very concessional terms as well as remittances (from Samoans working abroad) of convertible foreign currencies into Samoa.

Although this conclusion is supported by the relatively sound overall balance of payment position, the fact that this is only achieved through high levels of inward remittance and concessional development assistance flows, indicates an underlying fundamental weakness in the country’s external position. National development strategies highlight, inter alia, the need to both broaden and deepen the export base of the economy to reduce the trade imbalance.

It is therefore recommended that a foreign exchange premium should be applied to the economic analysis. It is proposed that project outputs which would be exported should receive a foreign exchange premium of 10% while for project inputs purchased from abroad an additional cost component of 10% should be imposed.

Discount Rate/Opportunity Cost of Capital

General

Once the stream of net economic benefits over the lifetime of a project has been determined there is a need to establish a measure of the worth of the project to the society. As outlined in Chapter 4: Project Formulation, two methods have been introduced for this purpose; the internal rate of return (IRR) and/or the net present value (NPV). In order to establish the value of these two indicators and obtain a measure of the worth of the project, it is necessary to establish a measure of the economic discount rate.

Obviously, the rate chosen will have significance on the result of the cost-benefit analysis; indicators which may appear worthwhile at one discount rate may not be so at another rate. In an attempt to establish an appropriate discount rate, the two following considerations have been considered:

- i. The opportunity cost of capital
- ii. The actual cost of capital

Opportunity Cost of Capital

The opportunity cost of capital is the rate of return of capital invested in a project which could be earned elsewhere in the economy. Obviously if the economic IRR of a project is larger than this opportunity cost of capital or if the NPV is positive after having discounted the net economic benefits to the present value, the project would be worth undertaking.

In practical terms, however, relevant literature is vague about how to determine the discount rate in terms of the opportunity cost of capital. Several authors advise that the rate should not fall below 4% to 5% as this can be earned with reasonable security in the international capital markets to which country has access. Furthermore, a number of authors suggest that in most developing countries, the rate may be assumed to be somewhere between 8% and 15% and that a common choice could be 12%. This rate is significantly higher than the current weighted average commercial banks' lending rate of approximately 8.0%, hence recommending a lower discount rate.

Actual Cost of Capital

Samoa is a net borrower of capital for the funding of its development process. These borrowings, primarily from international financing agencies, are on an average rate of interest of 2% i.e. on very concessional terms. In real terms, i.e., adjusting for domestic inflation, the actual cost of capital is usually negative⁴⁷ when the funds are on-lent from Government to statutory bodies or other end uses at a rate of about 6%. It is therefore proposed that 6% be used as the discount rate for economic analysis purposes.

Summary of National Economic Parameters for Samoa

In view of the above discussion it is recommended to apply the following National Economic Parameters in Samoa:

⁴⁷ When inflation is significantly above its targeted low inflation rate of below 3.0 percent.

Traded Goods

- i. The CIF price for imported goods converted to SAT\$ at the current exchange rate (see item 5 below).
- ii. The FOB price for exported goods (see item 5 below).

On-Traded Goods

- i. SCF⁴⁸ of 85% for local goods and services such as electricity, water, construction, transportation

Labour

- i. 50% of minimum wage rate for unskilled labour
- ii. The actual wage rate for skilled labour

Land

- i. A tentative figure for annual production foregone on freehold land is SAT\$ 1,000 per acre

Foreign Exchange

- i. The current foreign exchange rate, but project exported goods and services to be given a premium of 10% while for project imported goods and services a cost component of 10% to be added.

Discount rate

- i. An economic base rate of 6% (the sensitivity analysis to apply 4%, 6% and 8%)

⁴⁸ Based on the 1988 figures

