

project planning and management series

ACKNOWLEDGEMENT

The Project Planning and Management Series consists of a set of manuals and associated modules presenting practical approaches, tools and techniques for project planning and management. (See list on back cover). A product of the Government of Jamaica/USAID National Planning Project (1976-1980), the series was developed by the Project Development Resource Team (PDRT) of PAMCO for use in "action-training" workshops and reflects extensive experience in training and project development. All present PDRT members are contributing authors and have worked together in writing, revising and publishing the series. Special credits are due to Dr. Merlyn Kettering for design and development of the series; Dr. Bruce Brooks for writing final versions of many modules; Mrs. Marjorie Humphreys for assuming primary editing and production responsibility and for organizing draft papers into more useful materials; Mr. Lascelles Dixon, head of PDRT since 1979, for designing the cover and improving many of the illustrations; and Mrs. Christine Hinds and Miss Linette Johnson for typing the drafts and final manuscripts. Any comments on the series and its usefulness are welcome.

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MODULE 18

PROJECT PROFILE PREPARATION
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A. REFERENCES: MODULES 1 - 20

B. NATURE AND SIGNIFICANCE OF THE PROJECT PROFILE

The Project Profile is a document which concisely describes a proposed project idea. The Project Profile presents the project idea in a standardized format to facilitate the appraisal of project ideas by the Government of Jamaica. This standard format requires particular preliminary data and information necessary for project appraisal and pre-selection. As the first step in introducing a project idea for the consideration and action of the government, the Project Profile is a necessary document for project development.

The Project Profile is prepared by any initiating Agency, Department or Ministry. To ensure that adequate information and data is available at this initial stage of the project development, the Project Profile assures that project ideas are clearly identified and that all important information is available to decision-makers. The various sections of the Project Profile answer the following questions: What is the project? Why should it be done? How can it be accomplished? When will it be done? How much will it cost? How will it be financed?

The primary purposes of the Project Profile are to:

- establish preliminary documentation on a project idea to assist decisions on the future of the project;
- identify the basic needs and objectives which the project would be developed to address;
- identify the specific outcomes (benefits) and outputs (products and/or services) of the project as designed to satisfy the identified needs;
- outline in a preliminary design, the major components of the project and critical assumptions and conditions upon which project development is dependent:

- provide preliminary financial information so that projects can be appraised, pre-selected and incorporated into the capital budget.

C. LEVEL OF ACCURACY

Data for the Project Profile can be obtained from readily available sources. These sources might consist of such documents as Ministerial papers, sectoral studies, market studies, data and history from similar projects, etc. New data need not be developed for the preparation of this document. Where data is not available, assumptions must be made, and so identified, during the preparation of the Project Profile.

Because of the nature of data, estimates and assumptions required for the Project Profile, no specific level of accuracy regarding costs and quantities will be expected. However, the Project Profile should be as accurate and detailed as possible, especially in the statement of project objectives, goals and needs. This information will form the basis for initial appraisals of the project idea, e.g., its contribution and role to national and sectoral priorities.

D. OPERATION OF THE PROJECT PLANNING SYSTEM*

The following is a brief description of how a project requiring external financing will be prepared and submitted for appraisal and authorization at the Project Profile stage.

1. Ministries/Agencies receive project ideas from various sources. Some ideas may be spontaneously given; others may arise from sector analysis conducted by the Ministries/Agencies.
2. Ministries/Agencies screen the project ideas and select some for more specific identification.
3. The sponsoring Ministry/Agency is responsible for project identification. Project Identification will culminate in the preparation of a Project Profile.

*An explanation of the National Decision-Making System for externally financed development projects is contained in SUMMARY: DECISION-MAKING SYSTEM FOR PROJECTS which is available from PAMCO.

4. If the project requires loan or foreign financing, the Project Profile is submitted by the sponsoring Ministry/ Agency to PAMCO, where it undergoes further examination under the Identification Stage of the Project Cycle.
5. PAMCO may collaborate with the sponsoring Ministry/ Agency to facilitate completion of the Project Profile. On the basis of the Project Profile, the Projects Division prepares a Preliminary Analysis or Issues Paper.
6. The Projects Division consults with the:
 - (a) National Planning Agency;
 - (b) Scientific Research Council;
 - (c) Town and Country Planning Department;
 - (d) Ministry of Finance;
 - (e) Jamaica Development Bank;
 - (f) any other relevant Ministry/Agency, in order to assess project compatibility with the overall planning framework.
7. These will append comments and/or analyses and return the Preliminary Analysis with comments to PAMCO.
8. PAMCO submits the Project Profile and the Issues Paper to the Pre-Selection Committee. The Pre-Selection Committee will comprise representatives of National Planning Agency, Town and Country Planning Department, Scientific Research Council, Jamaica National Investment Corporation, Jamaica Development Bank, Ministry of Finance, and PAMCO with the Minister of State for Planning as Chairman.
9. The Pre-Selection Committee decides, whether the project should be:
 - (a) accepted for preparation or modification;
(Feasibility Study)
 - (b) returned for better identification;
 - (c) deterred for specific period of time;
 - (d) rejected.
10. Economic Council will make a official decision on the project, based upon the recommendation of the Pre-Selection Committee and other project documentation. This decision is submitted as a recommendation to the Economic Council.

11. Decisions of the Pre-Selection Committee are transmitted to the Ministries/Agencies through PAMCO with appropriate instructions. PAMCO will detail the requirements of "deferred" or "returned" projects and work closely with Ministries/Agencies to accomplish the desired effect. No further action would be necessary on rejected projects.

E. PREPARATION PROCEDURES FOR PROJECT PROFILES:

The format of the Project Profile (SEE APPENDIX 18.1) is designed to facilitate the understanding of the project reviewer, that is, the person who will be reading the document. The order of presentation the Project Profile does not conform with the logical steps required to prepare the document. Therefore, it is useful to explain the sequence of steps recommended for the preparation of the project profile.

An outline of the logical sequence of steps to complete the Project Profile are recorded below. Each step of the preparation is noted with a cross-reference to the section of the Project Profile to which the compiled information is relevant.

- Step 1. Record the history and origin of the project idea along with any other relevant background information. Record this information in a concise statement in Section A.2 of the Project Profile.
- Step 2. Identify the needs which the project is intended to address. State these in terms of specific objectives for the project. Record this information in Section B.1, paragraph a, of the Project Profile.
- Step 3. State the expected outcomes of the project in general terms of objectives and goals. Record this information in Section B.1, paragraph b, of the Project Profile.
- Step 4. State the specific outputs of the project, in terms of goals and targets as specifically as possible. This will require the identification of the type of product or service to be generated by the project. Record this in Section B.1, paragraph c, of the Project Profile.
- Step 5. Estimate the overall demand for major project outputs in gross quantity terms. Record this in Section B.2 of the Project Profile.

- Step 6. Identify how the project will be done, that is what are the methods and technologies involved in the project. Make a preliminary selection of an appropriate technology, but identify alternatives. The selected technology will become the basis for further estimates in the Project Profile.
- Step 7. Identify the sources and quantities of raw materials as specifically as possible. Record this in Section C.2 of the Project Profile.
- Step 8. Review the human resources required by the project and identify skills which may be particularly scarce or which require advance planning for training or recruitment. Record in Section C.3 of the Project Profile.
- Step 9. Identify organizations responsible for various planning, implementation and operational activities of the project. Record in Section G of the Project Profile.
- Step 10. Determine a rough schedule for the major activities of the project related to planning, implementation, financing and operations. Record in Section D of the Project Profile.
- Step 11. Estimate fixed capital investments for the project. These costs should be broken down into major expenditure categories. Identify any foreign exchange component (SEE APPENDIX I OF PROJECT PROFILE FOR SUGGESTED FORMAT). Record as Section E.1 of the Project Profile.
- Step 12. Estimate production or operating costs for the project. These may be based upon gross unit costs estimates or major categories of expenditure. Identify any foreign exchange component. (SEE APPENDIX II OF PROJECT PROFILE FOR SUGGESTED FORMAT). Record as Section E.2 of the Project Profile.
- Step 13. Estimate any revenues to be generated by the project, and identify any foreign exchange benefits (SEE APPENDIX III OF PROJECT PROFILE FOR SUGGESTED FORMAT). Record as Section E.3 of the Project Profile.
- Step 14. Determine the Cash Flow on the revenues and expenditures estimated for the project (SEE APPENDIX IV OF PROJECT PROFILE FOR SUGGESTED FORMAT). Record as Section E.4 of the Project Profile.
- Step 15. Determine the net investment and financing requirement for the Project (SEE APPENDIX V OF PROJECT PROFILE FOR SUGGESTED FORMAT). Record as Section F.1 of the Project Profile.

- Step 16. Identify the number of additional jobs that will be created directly by the project, making sure to take into account any possible job displacement due to the Project. Record in Section E.5 of the Project Profile.
- Step 17. Identify any other benefits that are likely to accrue from the project. Record in Section E.6 of the Project Profile.
- Step 18. Identify recommended financing sources for the subsequent pre-investment, implementation and operating phases of the project. Record in Section F.2 of the Project Profile.
- Step 19. Restate project objectives and goals, if necessary, and state specific targets for the project as appropriate. This is a reconsideration of information presented in Step 4 and 5 above. Record in Section B.1 of the Project Profile.
- Step 20. Describe the project, complete with major project components, relevant details and outcome. Record in Section A.1 of the Project Profile.

Finally, the presentation of the Project Profile should be reviewed to ensure that it is completed and that it presents the project appropriately. Make any adjustments which seem desirable.

The Project Profile is now ready to be submitted for review and appraisal, as noted above.

F. EXPLANATION OF PREPARATION STEPS FOR PROJECT PROFILE:

The preparation steps to complete the Project Profile may be a useful orientation for persons assigned the responsibility to complete a Project Profile. The following section is an explanation of each preparation step and includes:

- (a) an expanded statement on specific requirements of each step and section of the Project Profile;
- (b) a discussion of the purpose of each step and section; and
- (c) a general discussion of how to complete each step and section.

Persons who prepare the Project Profile should draw information from all readily available sources. The preparer is not expected to be an expert on all areas or sections to be completed, but is expected to find sources of information and to use the advice and skills of other

persons at relevant points in the completion of the document.

The following explanation of the preparation steps can be used as a guide to complete a Project Profile on any project. A completed Project Profile on a specific project can be obtained from PAMCO to assist in reviewing and understanding the preparation procedures.

STEP ONE: HISTORY AND BACKGROUND

Step One is a record of the general background and development of the project idea. It may begin with a statement of the origin and history of the project idea, e.g., market study, individual or group initiation, political desirability, etc.

The preparer should identify those groups who would support the project and describe all relevant history of the project idea, such as; How long has the idea been around? Has it been considered by government or other agencies before? Have any promises or statements been made concerning the project by any responsible authorities?

The purpose of this information is to alert planners and appraisers to additional sources of information and data on the project. It also assists in the formulation of the needs statement for project documentation by clarifying the areas and sources of support for and resistance to the project. It alerts attention to any commitments or announcements on the project so the preparers have a better understanding of the institutional setting and the desirability of the project in its social context.

The information gathered on this initial preparation step will be summarized in Section A.2 of the Project Profile. REFERENCE: MODULE 29 - PROJECT SELECTION ANALYSIS; MODULE 30 - BRAINSTORMING.

STEP TWO: NEED FOR THE PROJECT

The general needs which the project will be designed to meet should be carefully identified. The statement of needs can be expressed qualitatively as the broad objectives of the project. Initial statements of these needs should not be quantified, but they should be clear.

The need statement as expressed in general objectives for the project, will be related to national and sectoral objectives. Projects which are consistent with broader national and sectoral priorities will be given favourable attention in the review and appraisal processes. These objectives relate directly to larger programme and sector goals. The project objectives need to be clear and accurate. Examples of common general objectives might be: "increase the health of the people",

"provide employment", "reduce population migration to urban areas", etc. More specific objectives are preferable, if appropriate.

A clear statement of general project objectives is an important part of project documentation, as design and evaluation ultimately are based upon the capabilities to achieve the intended objectives. The general objectives are recorded in Section B.1, paragraph a, of the Project Profile. REFERENCE: MODULE 16 - PROJECT AREA ANALYSIS.

STEP THREE: EXPECTED PROJECT OUTCOMES

Project outcomes are those intended and expected tangible results and/or benefits to be provided by the project. The implementation and operation of a project will produce some desired goods or service. The specific goods and/or services of a project are called the project outputs. Project outcomes are broader than project outputs in that the project outcomes refer to a broader impact of the project, e.g., including the spillover and indirect effects produced by the project. Project outcomes refer to the achievement of a desired state of affairs or set of conditions through the successful execution of the project.

As an example, an agricultural processing plant will provide a specific consumption commodity, such as cassava flour, but it also provides employment opportunities and additional land development opportunities. These benefits may be considered project outcomes although they are not specific project outputs.

Anticipated project outcomes may be referred to as project goals. The project outcomes or project goals must be related directly to the project objectives described in Step Two, above. Goals are direct contributions to objectives. If a project outcome (goal) is not related to a project objective, then the objective statements are incomplete and should be expanded or the goals are misplaced and the project is really being designed to achieve other objectives.

The purpose of a clear statement of the hierarchy project objectives is used to provide a clear picture of the range of potential benefits to be gained from a project beyond the specific outputs of the project. These goals will be useful in project formulation and project evaluation. Project goals are specific statements of the project objectives and will permit the ranking of projects according to established priority ratings among those ideas having similar broad objectives.

The statement of project goals is recorded in Section B.1, paragraph b, of the Project Profile. REFERENCE: MODULE 1- DEFINING PROJECT OBJECTIVES: MODULE 2 - LOGICAL FRAMEWORK.

STEP FOUR: PROJECT OUTPUTS

The clear identification and definition of specific project outputs is the next step in completing the Project Profile. This is a critical step in the shaping and formulation of specific projects. Simply, this step requires the determination of the product(s) and/or services which will be generated by the project.

Where appropriate, all intermediate project outputs (goods and services) should be identified so that total demand, both internal and external to the project, can be discussed.

The listing of project outputs is the foundation for the demand analysis which follows. The listing should identify clearly the type and quality of project outputs anticipated and, where appropriate, ranges of project output may be identified for analysis in later market demand studies.

Project Outputs (goods and services, intermediate and final) are to be recorded in Section B.1, paragraph c, of the Project Profile.
REFERENCE: MODULE 1 - DEFINING PROJECT OBJECTIVES; MODULE 3 - WORK BREAKDOWN STRUCTURE; MODULE 2 - LOGICAL FRAMEWORK.

STEP FIVE: ANALYSIS OF DEMAND

After identifying project outputs, the next step is to estimate the demand for the specific outputs. Demand estimates should be made from readily available sources, such as historical data on past and current demand, which can be projected as an indication of future demand.

Analysis of the demand for the project outputs (goods and/or services) will depend upon the type of product being generated by the project. Two general categories of products can be identified which determine the methodology used for demand analysis.

- (a) Goods and services generated by the projects which can be sold for prices determined by the market system.
- (b) Goods and services generated by projects for which demand is determined through collective decision-making, such as by governments. This category includes such goods and services for which there is a collective need such as schools, health facilities, transportation facilities, etc.

Projects with marketable goods and services generate output which can be estimated through conventional forecasting methods. Projects with

non-marketable goods or services are more difficult to project. Therefore, we shall observe that demand analysis differs, generally, for those projects falling in categories (a) and (b) above.

Projects in category (a) above, will have estimation of demand based upon data or estimates of quantities demanded in the past. Such data might be obtainable from import statistics, domestic producers, tax records, consumption studies, requirements of government or of industrial users, sector studies, etc.

If readily available data are not available, appropriate estimates can be made from the experience or observations of individuals who are familiar with similar projects or from experiences of similar projects in other countries, as very few projects are completely unique. *All assumptions which must be made concerning the projection or estimation of demand must be explicitly identified.*

If demand analysis is made upon a total market, there must be an estimation of the extent to which the project will fill the demand. This means that necessarily, projections of output from other existing sources must be estimated, as appropriate, to determine the proportion of demand which the project will meet. The project will generally attempt to fill, in part at least, the supply gap.

For projects in category (b), above, decisions regarding the supply and quantity of goods and services are not based upon the direct demand of a market as much as the general demand based upon wants or preferences with respect to social priorities. Such demands may be based upon population trends (e.g. education and health services) and the financial capabilities of appropriate authorities to provide the services. For non-marketable goods and services, it is very important to project the costs which will be recurring as well as the capital costs so that demand is consistently co-ordinated with capabilities to provide.

The purpose of demand analysis can be summarized as the need to identify the market (including the collective market) for the critical project outputs so that adequate information is available to determine the level of production and the types of project production for the project output.

Project demand analysis on the major project outputs is recorded along with significant and critical assumptions in Section B.2 of the Project Profile. REFERENCE: MODULE 14 - DEMAND ANALYSIS; MODULE 15 - MARKET STRATEGY ANALYSIS.

STEP SIX: PROJECT TECHNOLOGY

Without going into extensive technological investigations, this section requires that the technologies and/or unit processes required by the project be identified. Based upon the selection of appropriate technology, other project components and inputs can be calculated. For this stage of planning, the preparer should recommend the type and level of project technology which appears to be most appropriate. For example, should the project be labour intensive, capital intensive, centralized, decentralized, etc.

Selection of the type and level of technology for a project is the first step in determination of production and service processes. Project technology suggests the types of inputs required for projects (e.g., labour and skill requirements, raw materials, location, process equipment). It also identifies the standards which project processes and outputs must meet to fulfil the requirements of the project users and operators (e.g., durability of materials, levels and quality of services and products).

Information on the technology and methods proposed for the project are recorded in Section C.1 of the Project Profile. This information is preliminary and will be tested in detail in prefeasibility and feasibility studies which will follow approval of the Project Profile. REFERENCE: MODULE 13 - PROJECT TECHNOLOGY ANALYSIS: MODULE 33 - ECOLOGICAL ANALYSIS.

STEP SEVEN: RAW MATERIAL SUPPLY

The level of production for the project is based upon the level of demand determined previously. This will also determine project size and level of technology to be used.

However, the level of production or service generation is greatly influenced by the availability of critical resources such as land, intermediate and raw materials, water, power and other inputs.

It may well be found that these constraints mean that the project will only meet a part of the supply gap even though the technology is available. It is essential then that the quantities and sources of raw materials should be determined so as to permit the determination of the level of production possible and thus the size of the project. Data and information on the supply of raw materials should be recorded in Section C.2 of the Project Profile. REFERENCES: MODULE 13 - PROJECT TECHNOLOGY ANALYSIS: MODULE 16 - PROJECT AREA ANALYSIS.

STEP EIGHT: SCARCE SKILLS

Successful completion of projects is often dependent upon the recruitment of appropriate human resources to fulfil the demands of the project. All labour requirements for project implementation and operations should be identified. Special attention must be given to any skills which may be difficult to obtain. These may be technical, managerial or professional positions, in particular. These should be noted in early planning stages so that there is sufficient time to prepare for the recruitment and/or training of persons with the required skills.

Conclusions regarding the human resource requirements for the projects, and especially any recommendations regarding scarce human skills, should be recorded in Section C.3 of the Project Profile.

STEP NINE: ORGANIZATIONAL RESPONSIBILITIES

The Project Profile includes the recommendation of agencies or Ministries which will assume responsibility for the various phases in the development of the project. For example, organizations responsible for pre-investment planning, financing, implementation and operations should be specified and their relationships indicated. Alternative organizational arrangements may be suggested, as appropriate. If unusual organizational recommendations are made, a justification may be attached to the recommendation.

Identification of agencies responsible throughout project development is important at this initial planning stage so that all relevant agencies may be involved in the planning processes. Early discussion of organizational responsibilities may result in the selection or the creation of organizational arrangements for planning and/or implementation which may be more appropriate than traditional arrangements.

The recommendations on organizational responsibilities are recorded in Section G, of the Project Profile. REFERENCES: MODULE 5 - PROJECT ORGANIZATION: MODULE 6 - LINEAR RESPONSIBILITY CHARTS: MODULE 12 - INSTITUTIONAL ENVIRONMENT ANALYSIS.

STEP TEN: PROJECT SCHEDULE

A tentative schedule of implementation for the major project components should be recommended in the project profile. Rough calculations of a schedule may take the form of a bar chart, Gantt chart or milestone chart and should phase only the major project phases such as pre-investment planning, design and engineering, implementation or construction, and on-going operations or project divestment. Particular project components (such as procurement of land, equipment or personnel or training and construction times)

should be included if they are especially critical or relevant to timing and scheduling for the project.

Assistance and advice may be sought from persons qualified in particular project component activities in order to obtain reasonably accurate time estimates and to assist in the sequencing of activities. A recommended project schedule allows the judgement of time requirements for project development so that the project can be internally co-ordinated as well as facilitating co-ordination with other projects and programmes. This may be critical for example, in the assignment of personnel or in the acquiring of foreign technical or financial assistance.

The project schedule is recorded in Section D of the Project Profile. REFERENCES: MODULE 7 - PROJECT SCHEDULING BAR CHARTS; MODULE 9 - PROJECT SCHEDULING NET WORK ANALYSIS; MODULE 11 - RESOURCE PLANNING AND BUDGETING.

STEP ELEVEN: CAPITAL INVESTMENT COSTS

Based upon the selection of technology and estimation of the levels of production for the project, capital investment costs can be estimated. Capital (or fixed) investment of the project will consist of such requirements as land, buildings, equipment, machinery, construction cost, etc.

The quantity and cost estimates should be aggregated in the general categories of expenditure appropriate for the project and should be based upon historical unit cost records if possible. It should not be necessary to do extensive calculation, as much information is available on "order-of-magnitude" estimates which are adequate for this planning stage.

The estimates of capital costs should be updated, however, to reflect the time periods anticipated for implementation of the project, e.g., if inflation is increasing prices of materials at predictable rates.

Information on the general levels of capital expenditures should be available locally, but if unavailable, data from the experiences of other countries might be available. Commercial firms will also have relevant information in many instances. Any information taken from sources external to the local situation, should be modified to reflect local conditions such as productivity, building and construction standards, material costs, etc.

Fixed or capital costs are presented in summary form in the Project Profile. The foreign exchange component of any capital costs should be identified at this point. The estimates of capital investment are recorded in Section E.1 of the Project Profile (SEE APPENDIX 18.1.I

FOR SUGGESTED FORMAT). REFERENCES: MODULE 17 - PROJECT COSTS AND BENEFITS; MODULE 20 - CASH FLOW ANALYSIS.

STEP TWELVE: OPERATING COSTS

Estimates for physical resource requirements are completed with assessment of input quantities and cost required for project operation. Operating costs are estimated in the same general manner as capital investment. That is, the estimates are aggregated into major categories reflecting the order-of-magnitude recommended for the project. If adequate historical data for local conditions is unavailable, estimates may be obtained as described above. Also, engineers familiar with the specific processes incorporated in the project may be consulted to advise on estimations of operating costs. Operating costs normally include such inputs as raw materials, intermediate materials, overhead and maintenance costs, labour, packaging or delivery costs, etc.

As with the estimation of capital investment costs, any foreign exchange component of operating costs should be isolated. Operating costs are recorded in summary form in Section E.2 of the Project Profile (SEE APPENDIX 18.1. II FOR SUGGESTED FORMAT). REFERENCES: MODULE 17 - PROJECT COSTS AND BENEFITS; MODULE 20 - CASH FLOW ANALYSIS.

STEP THIRTEEN: REVENUE ESTIMATES

When appropriate, estimates of revenues to be generated by the project should be calculated, based upon the order-of-magnitude of the project as proposed. The calculations can be based upon the quantity of the primary product or service level and upon the estimated unit value (or service fee) which is recommended for the project product(s). These estimates need not be highly refined, but should be of similar accuracy as the cost estimates discussed above. Any assumptions made in the estimate of revenues should be clearly stated. The purpose of revenue estimates is not for sophisticated financial analysis, but to provide full information on the nature and objectives of the project at this initial planning stage. Any foreign exchange benefits derived by the project should also be determined.

Estimates of revenues generated by the project are recorded in Section E.3 of the Project Profile (SEE APPENDIX 18.1.III FOR SUGGESTED FORMAT). REFERENCES: MODULE 17 - PROJECT COST AND BENEFITS; MODULE 20 - CASH FLOW ANALYSIS.

STEP FOURTEEN: CASH FLOW

Having determined the approximate revenues and costs, one way of estimating the worth of the project is to subtract the costs from the benefits on a year-to-year basis to arrive at a net benefit stream or the cash flow. A project can be seen as earning a stream of gross benefits from which must be paid the input costs of the project such as raw materials, labour, power, etc. What is left over is available to pay interest on capital borrowed, and to repay the capital borrowed.

A Cash Flow Statement should be prepared in Section E.4 of the Project Profile using Appendix 18.1.IV as the suggested format.
REFERENCES: MODULE 19 - FINANCIAL ANALYSIS; MODULE 20- CASH FLOW ANALYSIS.

STEP FIFTEEN: NET INVESTMENT SCHEDULE

The financing of a project can take the form of suppliers credit, short term debt, long term debt, and equity. Projects that have a long investment period may be partially self-financing, that is, the revenues may be used as part of the investment thus reducing the total financing (outside of the project) required.

The net investment schedule provided a year-to-year description of the financing needs of the project. This should be recorded in Section F.1 of the Project Profile using Appendix 18.1.V as the suggested format. REFERENCES: MODULE 19 - FINANCIAL ANALYSIS; MODULE 20 - CASH FLOW ANALYSIS.

STEP SIXTEEN: ADDITIONAL EMPLOYMENT

One of the Government's main objectives is the creation of employment opportunities for the large number of unemployed in the society. The desirability of advancing a project to the feasibility stage is dependent on its relative priority at the national level. It is, therefore, important that an identification be made of the number of additional jobs that will be created directly by the project, making sure to take into account any possible job displacement due to the introduction of the project.

Record this information in Section E.5 of the Project Profile.
REFERENCES: MODULE 3 - WORK BREAKDOWN STRUCTURE; MODULE 11 - RESOURCE PLANNING AND BUDGETING.

STEP SEVENTEEN: ADDITIONAL BENEFITS

Most projects give rise to indirect benefits which are not clearly attributable to the project itself. An agricultural project, for example, may give rise to new income from investment in new processing

facilities, and higher farm incomes will benefit local shop keepers.

When appropriate, additional benefits generated by the project should be indicated and any assumptions clearly stated. Since any additional benefits will not be included in the Cash Flow, it would not be necessary at this stage for these to be quantified.

REFERENCE: MODULE 26 - SOCIAL ANALYSIS.

STEP EIGHTEEN: PROJECT FINANCING

Financing constitutes the critical link between ideas and action. It is often necessary to obtain financing for pre-feasibility and feasibility studies as well as for project implementation. The problem of financing is not only that of securing the total investment requirements of a project but also, and equally important, ensuring that the funds are available, when and as needed. Otherwise costly delays may occur. The Project Profile should indicate the volumes and schedules of investment requirements in a crude set of estimations over the life of the project. If financing is required for subsequent planning, this should be indicated with some accuracy and prospective sources of such financing should be proposed.

In proposing financing for advanced planning stages, sources for financing should be identified, together with relatively accurate amounts and schedules. Sources of funds may be broadly classified as internal or external (i.e., to the operating Agency or Ministry). They may also be broken down into foreign and domestic sources or into governmental or private sources. If a project can be primarily financed from within an agency, it will not be generally essential to follow the planning stages required for projects which demand special or capital budgeting. The following general sources of financing might be indicated in the Project Profile.

Internal to the Agency:

- (a) Agency's income;
- (b) Depreciation reserves.

External to the Agency:

- (a) Capital contributions (e.g., stocks)
- (b) Loans (domestic and foreign)
 - Corporate bonds
 - Government bonds
 - Borrowing from investment/financing institutions
 - Borrowing from foreign government assistance programmes
 - Other special financing arrangements

- (a) General Revenues
- (b) Special funds
- (c) Grants or aids

A clear justification should be presented for proposals to tap each of the identified financing sources. If appropriate, proposed terms and conditions of credit might be stipulated, e.g., often only direct and indirect foreign currency costs of projects are eligible for loan financing by foreign institutions.

Discussions of financing arrangements, terms and conditions may proceed under the direction of the Ministry of Finance and the operating Ministry after the pre-selection of the project by the Pre-Selection Committee. REFERENCE: MODULE 44 - INTRODUCTION TO LENDING AGENCIES.

STEP NINETEEN: OBJECTIVES REVIEWED

After the formulation of the major components of the project, it is beneficial to review the project objectives and goals which have been identified in Section B.1 of the Project Profile (Step Three, above). The shaping of the project and any substantive changes which may occur through the development of the project idea may now require a modification in the previous statement of objectives. This step provides an opportunity to test the project as proposed against the initial statement of goals and objectives. Modifications may be required if for example, the shape of the project or the objectives are not consistent with each other.

As the project has essentially taken shape, it is now possible to finalize specific, quantifiable targets for the project. Project targets are identifiable both quantitatively and qualitatively as the project is formulated. For example, a project output may be the production of 15,000 tons of flour of a specific quality annually. The 15,000 tons of milled flour is a project target. Additional targets may include any employment opportunities attached to the milling process, such as the employment of 40 persons through the provision of new jobs as a result of the project.

This is a subsidiary project target, although it is a direct output of the project.

Modification of the statement of objectives and project targets in quantifiable terms are recorded in Section B.1 of the Project Profile, as appropriate. REFERENCES MODULE 1 - DEFINING PROJECT OBJECTIVES; MODULE 2 - LOGICAL FRAMEWORK.

STEP TWENTY: PROJECT SUMMARY

The project summary can only be comprehensively presented after the shaping of all the integrated components which form the project. After completing the above steps, the project can be concisely and easily described. The project summary is a description of what the project essentially is, whether it is integrated with other projects, a description of the major components, and the expected outputs and outcomes of major importance.

This section is a summary of the detail presented throughout the text of the Project Profile. It is primarily intended to provide an introduction of the Project idea to the reader of the document. Any unusual features which may distinguish the project should be included along with the normal project description. The location of the project and rationale for the location, for example, may be important as part of the summary. Issues involved in project selection should also be incorporated into a summary description of the project. Thus, if the location or technology is controversial, this should be indicated.

The Project summary is presented in Section A of the Project Profile. It cannot be competently presented until all other steps in project identification for the Project Profile have been completed.

Earlier PDRT working papers relevant to this topic include
 "Project Profile", contributors: M. Kettering, B. Charles, A. Hyde, J. Kristiansen, 1976. (15 pages).
 "Project Profile", contributors: M. Kettering, A. Hyde, D. Logan, J. Kristiansen, 1977. (7 pages).
 "Project Profile Preparation Manual", contributors: M. Kettering, J. Kristiansen, A. Hyde, D. Logan, (version 1: 18 steps), 1977. (16 pages).
 "Project Profile Preparation Manual", contributors: M. Kettering, A. Hyde, D. Logan, V. Gooden, (version 2: 20 steps), 1977.

APPENDIX 18.1

A. PREREQUISITES:

B. DISCUSSION:

The Project Profile is a brief document prepared by the Ministry or Agency which sponsors a project idea. It represents the first step of planning a project and presents the appropriate preliminary information to permit an early appraisal of the merits of a project.

Project Profiles must be completed in the standard format which is outlined below. The Project Profile is comprised of seven major sections which answer the following questions about the proposed project:

What is the project proposal?
Why should the project be done?
How can it be accomplished?
When will it be done?
How much will it cost?
How will it be financed?
Who will do it?

It is estimated that each section will require approximately one page, so that with the accompanying Appendices of financial information the completed Project Profile should not exceed ten to twelve pages. The Project Profile is submitted to the Projects Division of the Ministry of Finance for appraisal and selection.

PROJECT PROFILE FORMAT

A. WHAT IS PROPOSED TO BE DONE?

- A.1 *Project Summary*: Provide concise description of the idea, consisting of its major components, expected products and/or services to be generated and project location(s).
- A.2 *Project History*: State the history of the project idea and other pertinent background information. Please append any reference documents.

B. WHY SHOULD THE PROJECT BE DONE?**B.1 Objectives**

- a. State the broad objectives of the project.
- b. State the more specific goals of the project.
- c. State specific quantifiable outputs (targets) of the project.

B.2 Demand Analysis

- a. Identify the project outputs for which demand analysis has been performed.
- b. Describe the demand for the project products or services. Critical assumptions for calculations of demand must be identified.

C. HOW CAN THE PROJECT BE ACCOMPLISHED?**C.1 Methods and Technology**

- a. Identify alternative technologies which can be used to accomplish this project.
- b. Describe briefly the preferred technology and level of output for the project, giving reasons for such choice.

C.2 Raw Material: Identify the raw materials required giving quantities and sources.

C.3 Scarce Skills: Identify any scarce skills required for project operation and state the plans for securing such skills.

D. WHEN WILL THE PROJECT BE DONE?

Scheduling Estimates: Provide recommended schedules for the major phases and components of the project by appropriate time periods. At a minimum, include pre-investment planning, design and engineering, implementation, and starting date for operations.

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E. WHAT ARE THE PROJECT COSTS AND BENEFITS:

- E.1 *Estimates of Capital Requirements:*** Identify, quantify and cost out the aggregate investments or capital requirements of the project. Identify any foreign exchange component. (SEE APPENDIX 18.1 FOR SUGGESTED FORMAT).
- E.2 *Estimates of Operating Requirements:*** Identify, quantify and cost out aggregate operating requirements of the project. Identify any foreign exchange component. (SEE APPENDIX 18.II FOR SUGGESTED FORMAT).
- E.3 *Estimates of Annual Revenues:*** Estimate annual revenues from the project, if applicable. Identify any foreign exchange benefits. (SEE APPENDIX 18.III FOR SUGGESTED FORMAT).
- E.4 *Estimates of Cash Flow:*** A cash flow estimate - an estimate of revenue and expenditure of the Agency carrying out the project from which it can be determined whether the funds will be available when needed. (SEE APPENDIX 18.IV) FOR SUGGESTED FORMAT).
- E.5 *Employment Generation:*** State how many additional jobs will be created directly by the project.
- E.6 *Additional Benefits:*** Indicate other benefits which are likely to accrue from this project.

F. HOW WILL THE PROJECT BE FINANCED?

- F.1 *Net Investment and Financing:*** Summarize net investment and financing requirements. (SEE APPENDIX 18.V FOR SUGGESTED FORMAT).
- F.2 *Financing Sources:*** State the recommended sources and amount of financing for the major project phases. Include domestic as well as foreign sources.

G. WHO WILL DO THE PROJECT?

Responsibilities: State recommended organizations (and alternatives, if applicable) to be responsible for project pre-investment, planning, financing, implementation and operations.

CAPITAL COST ESTIMATES

J\$'000

PAMCO, PDRT
Resource
APPENDIX 18.1.1 Material
(SEC E.1)

ITEMS	Year																		
	Local	Foreign	Total																
I. Land Site Development Infrastructure (Specify)																			
II. Building and Civil Work (Specify)																			
III. Machinery & Equipment																			
IV. Engineering Fees Consultant Fees																			
V. Preproduction Launching Expenses																			
VI. Interest during Construction																			
VII. Other (Specify)																			
TOTAL																			

DO NOT DUPLICATE WITHOUT PERMISSION

OPERATING COSTS

PAMCO, PDRT
Resource
APPENDIX 18.1.II Material
(SEC E.2)

ITEMS	Year														
	Local	Foreign	Total												
1. Manufacturing Cost															
a. Raw Materials															
b. Labour															
c. Royalties															
d. Factory Overheads															
(i) Power															
(ii) Fuel															
(iii) Repairs & Maintenance															
(v) Others															
2. Administrative & Selling Expenses															
(i) Salaries															
(ii) Rents															
(iii) Advertising etc.															
3. Other Expenses															
(i) Taxes															
(ii) Insurance															
(iii) Depreciation															
TOTAL															

18.1.5

DO NOT DUPLICATE WITHOUT PERMISSION

GROSS BENEFITS

PAMCO, PDRT
Resource
Material
APPENDIX 18.1.III
(SEC E.3)

PRODUCT DESCRIPTION	Year				Year				Year				TOTAL TO 20 YEARS			
	Local		Foreign		Local		Foreign		Local		Foreign		Local		Foreign	
	Quant.	Value	Quant.	Value	Quant.	Value	Quant.	Value	Quant.	Value	Quant.	Value	Quant.	Value	Quant.	Value
(Product A)																
(Product B)																
(Product C)																
(Product D)																
TOTAL																

18.1.6

DO NOT DUPLICATE WITHOUT PERMISSION

CASH FLOW STATEMENT

PAMCO, PDRT
Resource
Material
APPENDIX 18.1.IV
(SEC E.4)

<u>YEARS:</u>	0	1	2	3	4	5	6	7	8	9	10	11	12	13
<u>SOURCES:</u>														
Revenue (Benefits)														
Debt														
Equity														
Salvage Value														
Other														
TOTAL SOURCES	\$													
<u>APPLICATIONS:</u>														
Capital Expenditure														
Interest During Construction														
Start-up Operating Expenditure														
Capital Replacement														
Operating Cost														
Other														
TOTAL APPLICATIONS	\$													
Net Cash Flow before Service														
CUMULATIVE NET CASH FLOW														
<u>DEBT SERVICE:</u>														
Loan (A)														
Loan (B)														
TOTAL DEBT SERVICE														
Net Cash Flow after Debt Service														
CUMULATIVE NET CASH FLOW														

DO NOT DUPLICATE WITHOUT PERMISSION

18.1.7

NET INVESTMENT & FINANCING

YEARS:

INVESTMENT REQUIRED:

Capital Expenditure
(Specify)

Start-up Operating Expenditure
(Specify)

Interest and Charges
Operating Cost
(Specify)

Total Investment

	1	2	3	4	5	6	TOTAL

Deduct:

Gross Revenue (Benefits)

NET INVESTMENT

FINANCING REQUIRED:

Suppliers' Credit

Long Term Debt

Total Debt

Total Equity

TOTAL FINANCING

DO NOT DUPLICATE WITHOUT PERMISSION

Project Planning and Management Series.

MANUAL - I Planning for Project Implementation
MANUAL - P Project Planning
MANUAL - M Project Management
MANUAL - PF Pioneer Farm Implementation Planning

MODULES

1. Defining Project Objectives (Objective Trees)
2. The Logical Framework
3. Work Breakdown Structure
4. Activity Description Sheets
5. Project Organization
6. Linear Responsibility Charts
7. Project Scheduling - Bar Charts
8. Bar Charting for Project Control/Scheduling
9. Project Scheduling - Network Analysis
10. Milestones Description Charts
11. Resource Planning & Budgeting
12. The Role of PAMCO
13. Project Technology Analysis
14. Demand Analysis
15. Market Strategy Analysis
16. Project Area Analysis
17. Project Costs & Benefits
18. Project Profile
19. Financial Analysis
20. Cash Flow Analysis
21. Discounting
22. Net Present Worth Analysis
23. Cost-Benefit Analysis
24. Benefit-Cost Ratio Analysis
25. Internal Rate of Return
26. Social Analysis of a Project
27. Economic Analysis of Projects (including Border Pricing)
28. Financial Statements & Ratios
29. Project Selection & Ratios Analysis
30. Brainstorming
31. Decision-making System for Projects
32. Project Institutional Environmental Analysis
33. Ecological Analysis for Projects
34. Introduction to Contracts, Jamaican Contract Documents & Tendering Procedures
35. Selection & Use of Consultants
36. Project Documents for Planning & Implementation
37. Report Writing for Projects
38. Project Files
39. Formats for Pre-Feasibility & Feasibility Studies
40. Motivation of Employees and Personnel Evaluation
41. Design of a Project Management Control System
42. Evaluating & Forecasting Project Progress & Performance
43. Project Termination
44. Introduction to Lending Agencies
45. Organizing and Conducting Conference Meetings
46. Withdrawal of and Accounting for Loan Funds in the Financing of Projects

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