

# project planning and management series

## ACKNOWLEDGEMENT

The Project Planning and Management Series consists of a set of manuals and associated modules presenting practical approaches, topics 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 2

## THE LOGICAL FRAMEWORK (1)

*Bruce Brocks*

A. PREREQUISITES: MODULE 1 - Defining Project Objectives

## B. DISCUSSION:

The logical framework is a project planning tool. It is also an evaluation tool that permits re-examination of the original design of a project after the project has been implemented to decide whether the project outputs are being produced and if these outputs are helping to reach the purpose of the project and the higher level sector goals.

There are two types of logic used in the construction of the logical framework for planning and evaluating a project. There is vertical logic which makes it clear *why* and *how* the project is undertaken. The logic evolves when the goal is set by asking the question "how?", which then leads to the clarification of the outputs and finally to the inputs. The vertical logic process becomes even clearer as the planner views the inputs and asks the question, "why?", these inputs are needed with the logical answer being in the form of "why logic" again leads to the logical purpose, and finally to the sector goal of the project.

There is also a horizontal logic in the framework of the project plan. This logic shows what is to be achieved by the project and what is required if it is to be a success. Included in the horizontal logic for each of the causative factors (goal, purpose, outputs, inputs) are objectively verifiable indicators. These show that certain results will be accomplished and a means of verification is established to measure the accomplishment of the project. The means of verification are specific means for measuring, e.g., results of questionnaires, past research results, demographic data, opinion of leaders, and industry data. Important assumptions that bear upon the causative linkages are statements that support the feasibility of the goal target, the purpose achievement, and the provision of outputs and inputs. The assumptions must be based on observable trends and recognized factual materials. They are not statements based on judgement of the planner alone.

(1) The primary sources for these materials were:

- a) Systems Tools for Project Planning. Peter Delp et al. International Development Institute, Indiana University, Bloomington, Indiana, 1977. pp. 260 - 264.
- b) The Logical Framework - Modification Based on Experience. Agency for International Development, Washington D.C., USA, November 1973. Second printing. pp. 25

ILLUSTRATION 1, shows the basic design of the Logical Framework and presents the logical nature of this planning and evaluation instrument.

Examination of ILLUSTRATION 1 shows that the vertical logic linkages in column one, i.e., inputs, results in outputs, outputs link to purpose, and the purpose is goal oriented. The horizontal linkages are between the separate vertical components and the items to the right of each of these in the chart. Therefore, there are four sets of logically linked components that create the horizontal logic in this project planning instrument.

#### C. PURPOSE

It is an aid in systematizing the planning of a project by graphically presenting the relationships and linkages between the project purpose, goals, outputs and inputs.

#### D. USES

The logical framework provides a readily understood tool for:

1. showing the causal linkages between the outputs, inputs purpose and goal when planning and evaluating a project;
2. defining the inputs, outputs, purpose and goal in terms that can be measured in real or objective terms;
3. hypothesizing the means - ends linkages between the inputs, outputs, purpose and goal;
4. recording the assumptions that are the external influences affecting the means - ends linkages; and
5. recording some realistic indications for measuring achievement of the outputs, purpose and goal.

The logical framework is most useful for graphically summarizing the project plans in one document, providing a means of evaluating the project including measures that are to be used, and the assumptions that must prevail if the inputs, outputs, purpose and goal are to be achieved as the project is presently designed.

#### *Using a Framework*

An example of a Logical Framework is shown in ILLUSTRATION 2. This indicates how the logical framework can provide a structure for concepts to ensure that the decision-maker gives sufficient thought to the basic ideas which should be incorporated into this project planning and evaluation tool.

ILLUSTRATION 1

THE "LOGICAL FRAMEWORK"

| PROJECT DESIGN SUMMARY<br>LOGICAL FRAMEWORK  |  |                       | Life of Project:<br>From Fy _____ to Fy _____<br>Total Donor Funding _____<br>Date Prepared _____ |
|--|--|-----------------------|---|
| Project Title: _____   |  |                       |   |
| NARRATIVE SUMMARY  | OBJECTIVELY VERIFIABLE INDICATORS                        | MEANS OF VERIFICATION | IMPORTANT ASSUMPTIONS   |
| Programme of Sector Goal: The broader objectives to which this project contributes | Measures of Goal Achievement                             |                       | Assumptions for achieving goal targets:   |
| Project Purpose:   | Conditions that will indicate Purpose has been achieved: |                       | Assumptions for achieving purpose:  |
| Outputs:   | Magnitude of Outputs:                                    |                       | Assumptions for providing Outputs:  |
| Inputs:  | Implementation Target: (Type and Quality)                |                       | Assumptions for providing Inputs:   |

2.3

E. *LIMITATIONS: OF THE LOGICAL FRAMEWORK*

The logical framework is ethically, programmatically and technically neutral. It gives no guidance on questions regarding equity of treatment, equity in employment opportunities, or other socio-economic equity questions unless they are specifically included in the goal or purpose of the project. Nor does this technique for introducing order and discipline into the intellectual processes of the project planner give any guidance on whether the project is optimal in the sense that it addresses the most critical constraint to goal achievement. Nor does it indicate that this approach to goal achievement is the best way to overcome the most critical constraint for reaching the project goal because it does not explore alternative ways to reach the project goal. There is no attempt to include in the logical framework any guidance from proven strategies nor an evaluation of cost of or feasibility of other strategies that may be said to reach the project goal.

The logical framework is objective - oriented. Actions, activities or processes that transform means into ends are not described by this planning tool. This need is filled by other planning tools, i.e., network analysis, project profile, project implementation plan, linear responsibility charts, organization charts, etc.

The logical framework matrix is merely a systematic and convenient tool that is useful to the project planner for simulating and visually displaying the project design elements so they can be summarized, understood and communicated more easily to others involved in a specific project, and most of all the project planners and evaluators.

## ILLUSTRATION 2

## AN EXAMPLE OF A LOGICAL FRAMEWORK

Life of Proj  
From Fy \_\_\_\_\_  
Total Donor  
Date PrepareProject Title & Number: Public Sector Training - Jamaica

| NARRATIVE SUMMARY   | OBJECTIVELY VERIFIABLE INDICATORS   | MEANS OF VERIFICATION  | IMPORTANT   |       |      |      |      |         |    |    |               |     |     |                      |     |     |                         |     |     |                     |     |     |                 |     |     |                 |    |    |             |   |   |  |              |              |   |  |
|---|---|--|---|-------|------|------|------|---------|----|----|---------------|-----|-----|----------------------|-----|-----|-------------------------|-----|-----|---------------------|-----|-----|-----------------|-----|-----|-----------------|----|----|-------------|---|---|--|--------------|--------------|---|--|
| <p>Program or Sector Goal:<br/>The broader objective to which this project contributes:</p> <p>To ameliorate economic and social conditions in Jamaica by improving administrative practices</p>            | <p>Measures of Goal Achievement:</p> <ul style="list-style-type: none"> <li>- Increased flow of development resources to the rural sector</li> <li>- Increased rural incomes</li> </ul>   | <ul style="list-style-type: none"> <li>- UNDP and IBRD statistics</li> <li>- National income statistics</li> </ul>   | Assumption<br>ing goal  |       |      |      |      |         |    |    |               |     |     |                      |     |     |                         |     |     |                     |     |     |                 |     |     |                 |    |    |             |   |   |  |              |              |   |  |
| <p>Project Purpose:<br/>To develop an institutional capacity to identify, finance and implement training for the public sector</p>  | <p>Conditions that will indicate purpose has been achieved: End of project status.</p> <ul style="list-style-type: none"> <li>- Training Plan completed</li> <li>- 500 Jamaican civil servants receive training</li> <li>- Ongoing survey of training needs</li> </ul>  | <ul style="list-style-type: none"> <li>- Administrative Commission Records</li> <li>- Project evaluations</li> </ul> | <p>Purpose tions</p> <ul style="list-style-type: none"> <li>- GOJ budces will to raise vice sa</li> <li>- Necessa tional be impl</li> </ul> |       |      |      |      |         |    |    |               |     |     |                      |     |     |                         |     |     |                     |     |     |                 |     |     |                 |    |    |             |   |   |  |              |              |   |  |
| <p>Outputs:</p> <ol style="list-style-type: none"> <li>1. Training Fund</li> <li>2. Training needs study</li> <li>3. Expansion of Management Training Institute</li> <li>4. Technical Assistance</li> </ol> | <p>Magnitude of Outputs:</p> <ol style="list-style-type: none"> <li>1. One Training Program</li> <li>2. 7,000 sq. ft. facilities plus related equipment</li> </ol>  | <ul style="list-style-type: none"> <li>- Administrative Commission records</li> <li>- Project evaluations</li> </ul> | <p>Output to Assumption</p> <ul style="list-style-type: none"> <li>- U.S. T.A are avai arrangem made to required</li> </ul>                 |       |      |      |      |         |    |    |               |     |     |                      |     |     |                         |     |     |                     |     |     |                 |     |     |                 |    |    |             |   |   |  |              |              |   |  |
| <p>Inputs:</p>  | <p>Implementation Target (Type &amp; Quantity)</p> <table border="1"> <thead> <tr> <th>USAID GRANT</th> <th>GCJ</th> <th>TOTAL</th> </tr> <tr> <th>US\$</th> <th>US\$</th> <th>US\$</th> </tr> </thead> <tbody> <tr> <td>Studies</td> <td>80</td> <td>80</td> </tr> <tr> <td>Training Fund</td> <td>570</td> <td>570</td> </tr> <tr> <td>Participant Salaries</td> <td>263</td> <td>263</td> </tr> <tr> <td>Materials and Equipment</td> <td>100</td> <td>100</td> </tr> <tr> <td>Training Facilities</td> <td>150</td> <td>150</td> </tr> <tr> <td>Operating Costs</td> <td>350</td> <td>350</td> </tr> <tr> <td>Technical Asst.</td> <td>96</td> <td>96</td> </tr> <tr> <td>Contingency</td> <td>4</td> <td>4</td> </tr> <tr> <td></td> <td><u>1,000</u></td> <td><u>1,613</u></td> </tr> </tbody> </table> | USAID GRANT  | GCJ   | TOTAL | US\$ | US\$ | US\$ | Studies | 80 | 80 | Training Fund | 570 | 570 | Participant Salaries | 263 | 263 | Materials and Equipment | 100 | 100 | Training Facilities | 150 | 150 | Operating Costs | 350 | 350 | Technical Asst. | 96 | 96 | Contingency | 4 | 4 |  | <u>1,000</u> | <u>1,613</u> | <ul style="list-style-type: none"> <li>- USAID controllers records</li> <li>- GOJ Ministry records</li> <li>- MOF, GOJ records</li> </ul> | <p>Assumption providing</p> <p>Inputs re available</p> |
| USAID GRANT   | GCJ   | TOTAL  |   |       |      |      |      |         |    |    |               |     |     |                      |     |     |                         |     |     |                     |     |     |                 |     |     |                 |    |    |             |   |   |  |              |              |   |  |
| US\$  | US\$  | US\$   |   |       |      |      |      |         |    |    |               |     |     |                      |     |     |                         |     |     |                     |     |     |                 |     |     |                 |    |    |             |   |   |  |              |              |   |  |
| Studies   | 80  | 80   |   |       |      |      |      |         |    |    |               |     |     |                      |     |     |                         |     |     |                     |     |     |                 |     |     |                 |    |    |             |   |   |  |              |              |   |  |
| Training Fund   | 570   | 570  |   |       |      |      |      |         |    |    |               |     |     |                      |     |     |                         |     |     |                     |     |     |                 |     |     |                 |    |    |             |   |   |  |              |              |   |  |
| Participant Salaries  | 263   | 263  |   |       |      |      |      |         |    |    |               |     |     |                      |     |     |                         |     |     |                     |     |     |                 |     |     |                 |    |    |             |   |   |  |              |              |   |  |
| Materials and Equipment   | 100   | 100  |   |       |      |      |      |         |    |    |               |     |     |                      |     |     |                         |     |     |                     |     |     |                 |     |     |                 |    |    |             |   |   |  |              |              |   |  |
| Training Facilities   | 150   | 150  |   |       |      |      |      |         |    |    |               |     |     |                      |     |     |                         |     |     |                     |     |     |                 |     |     |                 |    |    |             |   |   |  |              |              |   |  |
| Operating Costs   | 350   | 350  |   |       |      |      |      |         |    |    |               |     |     |                      |     |     |                         |     |     |                     |     |     |                 |     |     |                 |    |    |             |   |   |  |              |              |   |  |
| Technical Asst.   | 96  | 96   |   |       |      |      |      |         |    |    |               |     |     |                      |     |     |                         |     |     |                     |     |     |                 |     |     |                 |    |    |             |   |   |  |              |              |   |  |
| Contingency   | 4   | 4  |   |       |      |      |      |         |    |    |               |     |     |                      |     |     |                         |     |     |                     |     |     |                 |     |     |                 |    |    |             |   |   |  |              |              |   |  |
|   | <u>1,000</u>  | <u>1,613</u>   |   |       |      |      |      |         |    |    |               |     |     |                      |     |     |                         |     |     |                     |     |     |                 |     |     |                 |    |    |             |   |   |  |              |              |   |  |

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