AGENCY FOR INTERNATIONAL DEVELOPMENT

Summary Description of
The Project Design and Evaluation Methodology

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AGENCY FOR INTERNATIONAL DEVELOPMENT

Project Design and Evaluation Methodology

This is a summary description of the A.I.D. methodology for designing and evaluating development projects. It includes:

-- Elements of the design methodology - the logical framework.

-- Application of the design methodology.

-- Building evaluation elements into the project design.

-- The evaluation process.

-- Characteristics and limitations.

-- The logical structure of a development project.

-- The logical framework matrix.

Elements of the Design Methodology - The Logical Framework

The key element in project design and evaluation is the establishment of a logical framework for the project. The logical framework structures the project design in the following manner:

1. Defines project inputs, outputs, purpose, and higher goal in measurable or objectively verifiable terms:

   Project Outputs are defined as the specifically intended kind of results (as opposed to their magnitude) that can be expected from good management of the inputs provided. Outputs are also defined as the preconditions necessary to the achievement of the project purpose.

   Example: Manpower, training, machinery and building materials (inputs) can be managed to produce an irrigation network, trained operational staff, a water utilization schedule and a user rate scale (outputs).

   Project Purpose is defined as the primary reason for the project, i.e., the development which is expected to be achieved or the problem which is to be solved if the project is completed successfully and on time.

   Example: An irrigation network and associated facilities and services (outputs) are intended to produce increased per hectare yield (project purpose).

   Sector/Program Goal is defined as the programming level beyond the project purpose, i.e., the next higher objective to which the project is intended to contribute.

Example: Increased per hectare yield (project purpose) is intended to result in expanded exports of agricultural crops (sector goal).

2. Hypothesizes the causal (means-end) linkage between inputs, outputs, purpose and goal:

   a. There is a causative linkage between project outputs (irrigation network) and the ultimate project purpose (improved crop yield). The outputs must exist before the purpose can be achieved. The existence of the outputs does not however guarantee that the purpose will be achieved. Factors outside the project design (farmer attitudes and access to credit) may prevent achievement of project purpose. Thus the causative relationship between project outputs and purpose must be stated as a hypothesis, the external factors (assumptions) must be explicitly identified; and evaluation must then verify whether or not the hypothesis was realized.

   b. Similarly, there is a causative linkage between project purpose (improved crop yields) and progress toward a higher sectoral or program goal (expanded export of agricultural crops). The achievement of project purpose does not guarantee that the goal will be reached. Factors outside the project design (price and market conditions, spoilage and other losses) may prevent planned progress toward the higher goal. Thus the causative relationship between project purpose and higher goal must be stated as a hypothesis, the external factors (assumptions) identified, and the hypothesis validated.

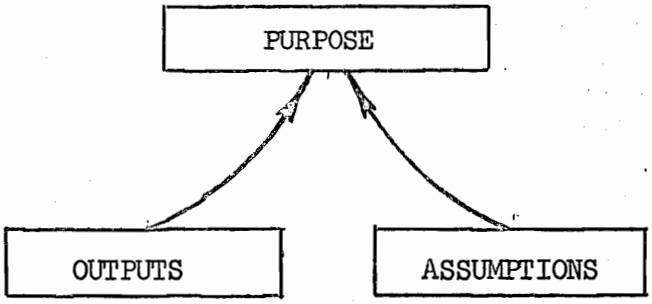
   c. These linkages should be proportional as well as causative. Thus, the improved crop yields will mean little for export earnings if they occur in a relatively small area. Analyzing a project in terms of means-ends linkages may highlight a lack of realism in the original plans, i.e., a disbalance between modest means and grandiose targets. It is important to determine if the means are sufficient in quality and quantity to produce the desired end product.

3. Articulates the assumptions (external influences and factors) which will affect the causal linkages:

   Assumptions are defined as situations or conditions which must be assumed to exist or to be brought about if the project is to succeed, but over which the project management team has little or no control.

Example: Increased crop yield (project purpose) will contribute to expanded export of agricultural crops (sector goal) only if price and market conditions are favorable (assumption).

The concept of causality rests on the basic premise that each level in the hierarchy of causative linkages can be shown to be not only necessary but also sufficient to cause the next higher level to be achieved. Since each causal linkage is subject to external factors beyond the control of project management, each linkage must be tested to assure that a given target level (e.g., outputs), in concert with the assumptions at that level, are necessary and sufficient to achieve the next level (purpose).



4. Establishes the progress indicators which will permit subsequent measurement or verification of achievement of the defined outputs, purpose, and goal.

   Progress indicators are defined as pre-established criteria or measures of an explicit and specific nature designed to provide objective assessment of project progress. Progress indicators should be objectively stated so that both a proponent of a project and an informed skeptic would agree that progress has or has not been as planned. Pre-establishing objectively verifiable progress indicators and targets helps focus discussion on evidence rather than opinions.

Application of the Design Methodology

The logical framework is primarily a project planning device. It also is used for re-examination of the original design of ongoing projects as a necessary prelude to evaluation, i.e., it sets the stage for determining and validating whether or not the project outputs are being produced, whether these outputs in fact are serving to achieve the project purpose; and finally whether this achievement is making a significant contribution, as planned, to the higher order goal.

The logical framework also establishes the practical limits of responsibility of project management. Articulating the project planning assumptions in explicit and operational terms permits a clearer separation between manageable interests and those factors which appear to be beyond the control of the project management team. The input-to-output level is largely susceptible to managerial control with relatively few uncontrollable external factors. At the output-to-purpose level, the possibility of managerial control decreases while external factors become more important. At the purpose-to-goal level, the ability of project management to predict and control events usually is further diminished.

Building Evaluation Elements into the Project Design

To make a project evaluable:

The project design must contain precise and explicit descriptions of those elements upon which evaluation subsequently depends:

-- targets expressed in terms which are finite and verifiable.

-- progress indicators at the output, purpose and goal levels.

-- a clearly delineated causal connection between the project purpose and the sector goal to which the project contributes.

-- clearly defined internal causal linkages between inputs, outputs and project purpose.

-- design assumptions, based on prior feasibility analysis, about the external factors affecting the project.

-- baseline data.

The project design must contain an evaluation action plan including:

-- review of prior experience with similar projects elsewhere, to the extent possible.

-- specific provisions for collecting progress data during implementation.

-- periodic evaluation.

The Evaluation Process

The evaluation process comprises three separate but integral steps:

Changes in the Project Setting - The evaluator assesses changes in host country circumstances, policies and priorities to see if they are substantially affecting the relevance and design of the project or progress.

Clarification of Project Design - The evaluator clarifies the existing project design elements, including: targets at output, purpose, goal levels; assumptions; and indicators; to assure that the design elements are stated in terms which are sufficiently precise, explicit, finite and verifiable to permit meaningful evaluation.

Evaluation of Progress and Search for Causal Factors - The re-examination of project design is followed by an evaluation process which (a) assesses the performance of all input factors (personnel, commodities) and all action agents (contractor, other donor, host country), (b) measures actual quantitative and qualitative progress toward outputs, purpose and goal, and (c) attempts to identify causal factors and weigh their impact. Guidelines, advisory material and worksheets have been developed for this purpose.

The evaluation findings are considered in an interactive group aimed at reaching sound evaluation conclusions and deciding future actions. These reviews include such people as the A.I.D. Mission Director, contract party chief, representatives of the host country and other donors. The review is designed to be a collaborative and constructive effort, not a judicial inquiry; replanning, not recrimination is the intent. The process is guided by a designated evaluation officer who helps the project managers analyze the project within the logical framework, organizes the group review and assures follow-up on decisions and action assignments.

The process produces, as a low-cost by-product of the evaluation process, a report which summarizes the evaluation findings and the proposed replanning actions. It is intended to demonstrate that a rigorous evaluation has occurred.

Characteristics and Limitations

All aspects of project planning (i.e., the formulation of targets, causal linkages, indicators and assumptions) are defined by the project planner and are project-specific. Similarly, the degree of rigor and the level of effort in collecting and analyzing data for the evaluation are determined by the action officer and are project-specific.

The logical framework methodology does not assure that the project is optimal, i.e., that the project directly addresses the most critical constraint to goal achievement, and is the most effective means for overcoming that critical constraint, unless the planners and/or evaluators choose to explore alternative approaches.

The logical framework methodology is programmatically and technically neutral. It gives no guidance on proven strategies and techniques, cost and feasibility of replication,

effects on ecology, concentration on key problem areas, reliance on the private sector, etc. Guidance in these programs and technical areas is available in A.I.D.

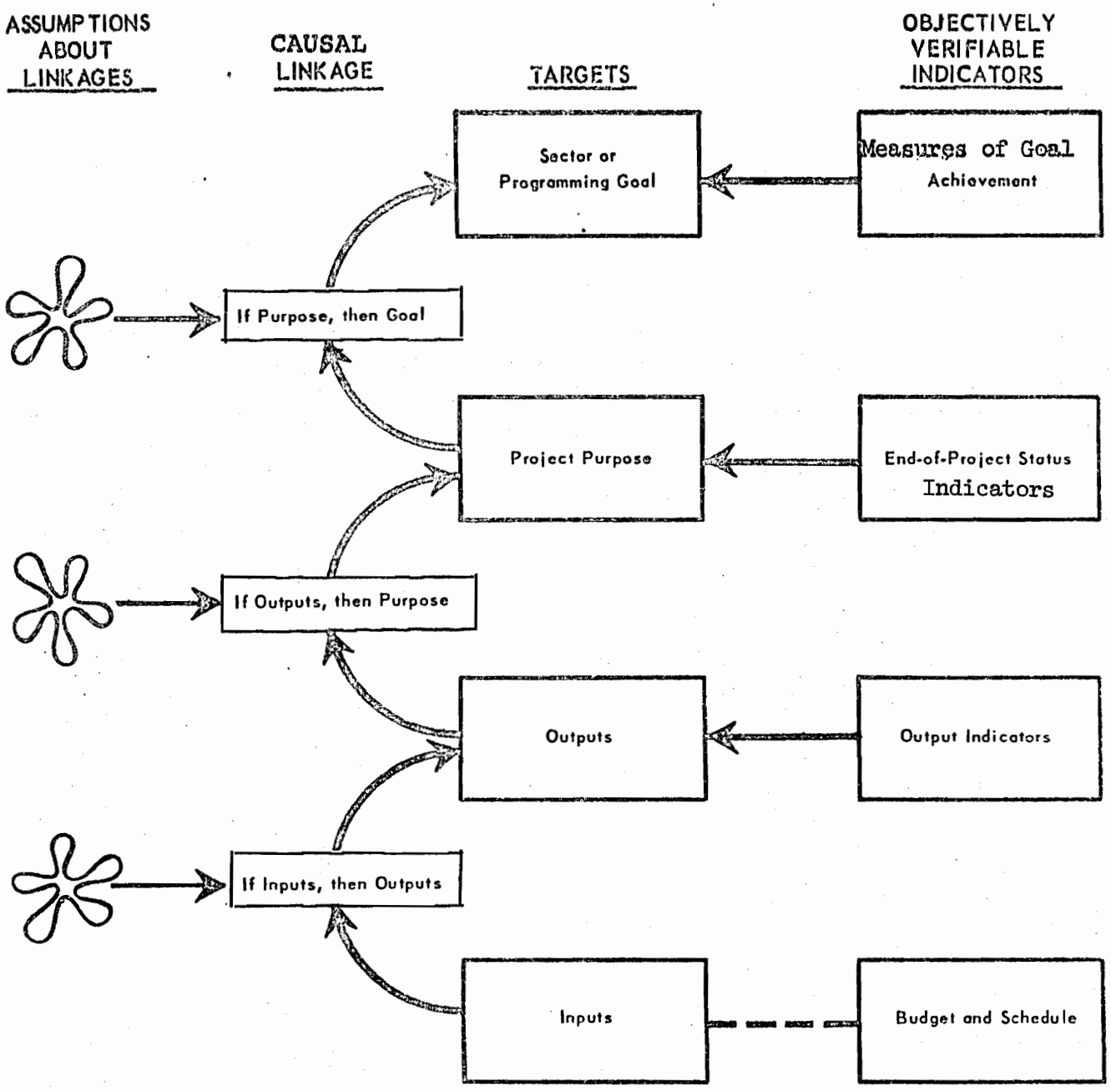
The logical framework itself gives no guidance on questions of equity or benefit incidence such as equitable income distribution, employment opportunities, access to resources, popular participation in decision-making and in the fruits of development projects, unless such aspects have been explicitly included in the statements of goal or purpose. Guidance on benefit incidence policies and criteria has been issued periodically and will continue to be developed and disseminated.

The logical framework methodology permits, but does not require, cost/benefit and cost/effectiveness analysis.

The logical framework matrix can be modified by the user for special circumstances, e.g., one or more horizontal rows can be added to provide for intermediate subsectoral goals.

The process produces, as a low-cost by-product of the evaluation process, a report which summarizes the evaluation findings and the proposed replanning actions. It is intended to demonstrate that a rigorous evaluation has occurred.

THE LOGICAL STRUCTURE OF A DEVELOPMENT PROJECT



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PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY _____ to FY _____
Total U. S. Funding _____
Date Prepared: _____

Project Title & Number: _____

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Program or Sector Goal: The broader objective to which this project contributes: (A-1)	Measures of Goal Achievement: (A-2)	(A-3)	Assumptions for achieving goal targets: (A-4)
Project Purpose: (B-1)	Conditions that will indicate purpose has been achieved: End-of-Project status. (B-2)	(B-3)	Assumptions for achieving purpose: (B-4)
Project Outputs: (C-1)	Magnitude of Outputs: (C-2)	(C-3)	Assumptions for achieving outputs: (C-4)
Project Inputs: (D-1)	Implementation Target (Type and Quantity) (D-2)	(D-3)	Assumptions for providing inputs: (D-4)

The Logical Framework Matrix

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