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The Food Security and Nutrition Monitoring Project -- IMPACT PROJECT -- Presentation Materials

IMPACT

FOOD SECURITY AND NUTRITION MONITORING PROJECT

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An Introduction to the Monitoring and Evaluation of U.S. Title II Food Aid Programs

Outline and Presentation Materials for PVO Training Workshops

by

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1996

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[These notes were taken from lecture materials developed by the IMPACT Project for use in training USAID and PVO partners. Since the development of these notes, changes have been made to the guidelines for PVOs. The notes were updated to some extent but the reader is referred to the BHR/FFP guidelines for DAP and PAAs and the recommended list for monitoring and evaluation indicators for use in Title II programs.]

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Introduction

The workshop outline and presentation materials provided here are meant to be used as companions to the following document:

Riely, F., et al. *Food Security Indicators and Framework for Use in the Monitoring and Evaluation of Food Aid Programs*. USAID Food Security and Nutrition Monitoring (IMPACT) Project, Washington, DC, November 27, 1995.

This document is a text version of materials developed for a lecture format. These materials have been developed and revised under funding from the USAID Food Security and Nutrition Monitoring (IMPACT) Project, and were tested in a series of PVO workshops which were held in 1995-6 in India, Eritrea, Ethiopia and Honduras. Although the authors are responsible for the content, special thanks go to Nancy Mock, Mahmud Khan and Bob Magnani (Tulane University), Anne Swindale (IMPACT), Tim Frankenburger (CARE), Drew Rogers (CRS), Sam Bickel (UNICEF) and others who provided useful comments during the development of these materials. The authors are also grateful to Eunyong Chung (USAID Office of Health and Nutrition) for her guidance at the initial stages of this activity. Thanks are also due to the USAID Office of Food-for-Peace for its support, particularly Robert Kramer, Tim Lavelle, Heather Goldman, Katherine Puffenburger, Herbie Smith, and Mike Harvey. Most importantly, the authors would like to recognize the kind patience and useful comments of the national staff at CARE/India, CRS/India, CRS/Ethiopia and CARE/Honduras who served as our hosts through these initial workshops.

Workshop Objectives

The overall goal of the workshop is to provide a starting point for the development of PVO monitoring and evaluation (M&E) systems for Title II food aid programs. Specific objectives are to:

- provide a rationale for the adoption of M&E systems in Title II programs, according to USAID policy
- support the consistent application of USAID food security conceptual framework in food security problem analysis
- introduce a monitoring and evaluation framework and definitions
- outline a process of identifying and collecting food security indicators
- illustrate methods to develop performance benchmarks and integrate M&E data into program decision-making

Workshop Schedule

MODULE 1

Introduction to Key Concepts

Objectives:

- Introduce the USAID definition of food security
- Define 'impact'
- Introduce the terms 'program monitoring' and 'impact evaluation'
- Define 'food security indicators'
- Discuss the construction of food security indicators and their application to various program types

USAID Definition of Food Security

When all people at all times have both physical and economic access to sufficient food to meet their dietary needs for a productive and healthy life.

Achieving food security requires that the aggregate availability of physical supplies of food is sufficient, that households have adequate access to those food supplies through their own production, through the market or through other sources, and that the utilization of those food supplies is appropriate to meet the specific dietary needs of individuals.

How is Impact Defined?

The term impact refers to the set of program results that occur at the beneficiary-level and that can be directly attributed to program activities, rather than external factors.

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mpacts may be defined as intermediate improvements in the capability of program beneficiaries to influence their own lives, such as through improved access to resources, or improved knowledge attained through training programs.

More typically, impacts may also refer to final improvements in the economic and personal well-being of individuals who receive goods and services through the program.

Impacts are often confused with program outputs, which refer to the quality and quantity of goods and services delivered through program activities.

Difference between Monitoring and Evaluation

Program monitoring focuses primarily on the measurement of program-level outputs. It involves the routine collection of information on an on-going basis to support basic management and accountability functions.

Impact evaluations help gauge the extent to which a program results in changes in food security conditions at the beneficiary-level. They support the management of current activities, inform resource allocation decisions across program components and support the design or re-design of future interventions.

Effective monitoring of program outputs is a critical aspect of evaluating impact. Without knowing who received what quantity and quality of goods and services at what cost, it is difficult to interpret the results of impact evaluations.

What Is a Food Security Indicator?

Food security indicators are summary measures of one or more of the dimensions of food security for a target population.

- ♦ Indicators are constructed from a set of observations of food security-related conditions or behavior.
- ♦ The process of indicators construction includes:
 - measuring relevant behaviors or conditions,
 - calculating a variable on the basis of a set of measurements,
 - classifying individuals in a population according to their food security status,
 - aggregating the number of individuals in each food security class, and
 - providing perspective by expressing the aggregate variable as a percentage of the target population.

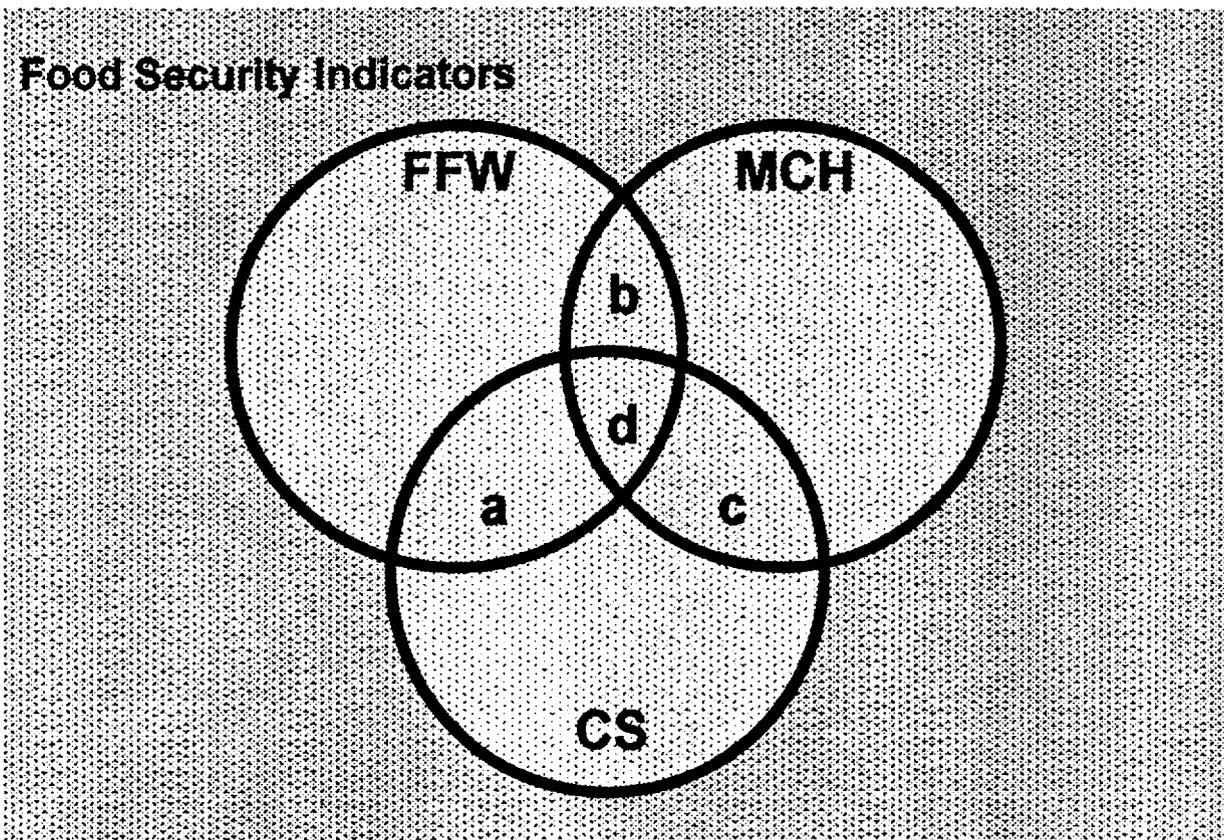
Food Aid Program Types

Food aid commodities or their monetized proceeds are used to support a variety of intervention types:

- ♦ Humanitarian Feeding Programs
- ♦ Food-for-Work Programs
- ♦ Maternal and Child Health Programs
- ♦ Child Survival Programs
- ♦ School Feeding Programs
- ♦ Other Child Feeding Programs
- ♦ Programs Using Monetization Funds

From World Food Day Report, The President's Report to the U.S. Congress, October 16, 1994

Overlap of Food Security Indicators by Program Type



FFW -- Food for Work Programs
MCH -- Maternal and Child Health Programs
CS -- Child Survival Programs

Riely, Cogill and Bailey (1996).

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Overlap of Food Security Indicators by Program Type

MODULE 2

Overview of USAID Food Aid/Food Security Policies

Objectives:

- Provide the policy basis for linking U.S. food aid to food security outcomes
- Outline the USAID information requirements for managing Title II food aid programs

Objectives of US P.L. 480 Food Aid Programs

It is the policy of the United States to use its agricultural productivity to promote the foreign policy of the United States by enhancing the food security of the developing world through the use of agricultural commodities and local currencies accruing under the Act to:

- combat hunger and malnutrition and their causes
- promote broad-based, equitable and sustainable development, including agricultural development
- expand international trade
- develop and expand export markets for U.S. agricultural commodities
- foster and encourage the development of private enterprise and democratic participation

P.L. 480 Program Types

- Title I
 - government-to-government sales of agricultural commodities for US dollars on concessional credit terms
 - targeted to food deficit countries with food security as development objectives
- Title II
 - grant food aid for emergency and development programs implemented by cooperating sponsors, mainly PVOs and WFP
 - largest component of U.S. food aid program
- Title III
 - multi-year government-to-government grants which use food aid to support policy reforms designed to improve food security and economic growth
 - conditionality often linked to sectoral and structural adjustment programs supported by dollar resources

Priorities for Title II Development Programs

- Programmatic Focus

- Improving household nutrition, especially for children and mothers
- Increasing agricultural productivity to alleviate one of the leading causes of hunger
- Increasing incomes in rural and urban areas through economic and community development and by promoting sound environmental practices

◆ **Geographic Focus**

- Sub-Saharan Africa
- South Asia

("Food Aid and Food Security: USAID Policy Paper," February 1995)

Priorities for Title II Development Programs (contd)

USAID will give priority in allocating food aid resources to programs which enhance agricultural productivity and improve household nutrition in the most food insecure countries, particularly those in Sub-Saharan Africa and South Asia. However, USAID will continue to approve new food aid activities in other regions of the world and in other program areas. These program and country priorities are not intended to prescribe arbitrary solutions to real world problems nor to restrict the flexibility of field managers. Integrated Approach to Food Aid Programs Food assistance is most effective where it is programmed in conjunction with dollar funding for technical assistance and with local currency for logistical support and grass-roots development.

Food aid can also enhance the effectiveness of other development programs such as nutrition education, family planning, child survival and community development projects.

"Food aid should be integrated to a greater extent with other USAID assistance resources."

Managing for Results

- ◆ USAID will shift its oversight focus from inputs and food aid distribution to the results of integrated food aid programs.

Performance monitoring and assessment systems will be introduced to permit USAID and the PVOs to demonstrate more clearly the food security impact of U.S. food aid programs.

Approval for programs will depend upon the ability of field managers to demonstrate that resources will have a sustained impact on food security.

Priorities for Section 202(e) Grant Funding

- ◆ **Direct Title II Project Costs**

- ♦ Efforts to Improve Impact through Evaluation
- ♦ Improvement of Project Administration, Management and Oversight, and Monitoring
- ♦ Costs of Implementing Audit and Evaluation Recommendations
- ♦ Dollar Costs of Title II Development Projects Financed by Monetized Proceeds

GAO Review of USAID Food Aid Programs

“... it is difficult to determine whether food aid programs promote food security, in part, because USAID has not established a clear policy and operational guidance to assist program managers in identifying food security objectives and evaluation methodologies for food aid programs.”

P.L. 480 Title II Guidelines for FY 1996 - 1997

USAID will place **particular priority** to food aid programs that focus on **improving agricultural productivity and household nutrition in the most food insecure countries**, particularly in Sub-Saharan Africa and South Asia. However, USAID will continue to approve new food aid activities in other regions of the world and in other areas of the program. The program and country priorities are not designed to prescribe arbitrary solutions to the world's problems, nor to restrict the flexibility of program managers.

USAID Missions are intended to be close partners in project planning, monitoring and evaluation and will submit comments annually for each Title II project. In particular, the DAPs of Cooperating Sponsors, including M&E objectives, benchmarks and indicators, will be subject to review and concurrence from USAID Missions. Emphasis has also been placed on the importance of integrating food aid and other resources:

Food aid is most effective when it is programmed in conjunction with funds for technical assistance and local currencies for logistical support and grassroots development. Food aid can also reinforce the positive impact of other development programs such as nutrition education, family planning, child survival and community development projects. "Food Aid should be better integrated with the other development resources USAID programs."

In keeping with its mandate to employ performance-based management methods, the Agency has shifted the oversight focus of food aid programs from an emphasis on commodity monitoring and accountability, to one which stresses the food security impacts of food aid programs on their intended beneficiaries. This new management focus is laid out in the USAID Draft Interim Guidelines for FY 1996 PL 480 Title II Development Project Proposals.

Managing for results requires the definition of high level objectives that are achievable, project outputs which support those objectives, and indicators of performance or achievement.

*In the current environment of limited food aid resources, there is a need to focus and streamline Title II development projects in order to **demonstrate greater impact and to ensure that appropriate monitoring and evaluation systems are established to document the results of that impact.***

This new focus requires that performance monitoring and evaluation systems be introduced into Title II programs to permit USAID and Cooperating Sponsors to demonstrate more clearly their programs' food security impacts. Approval for programs will depend upon the success of field managers in demonstrating that food security impact.

*USAID will change its focus from commodity monitoring to a focus on the impacts of food aid programs. **Monitoring and Evaluation Systems** will be implemented that permit USAID and the PVOs to clearly demonstrate the impact that U.S. food aid programs have on food security.*

- Specific elements of the Guidelines include the following requirements for the FY 1996 DAPs:
 - *An external impact evaluation of the project must be planned for in the DPP and conducted no later than the first quarter of the final year of the project.*
 - *The DPP should describe the **baseline data** utilized and its source, state the **indicators** developed for monitoring project-level progress during implementation and discuss criteria for assessing impact.*
 - *Criteria should be adequate to **measure progress in annual reporting and evaluation** and should include benchmarks for activity completion and indicators of project effectiveness.*
 - *The DPP should describe the information and **data collection** systems in place or planned that will be used to monitor progress, including data reporting procedures and mechanisms to analyze the data to direct future programming.*

The PL 480 Title II Guidance for FY 1997 reiterates the importance of monitoring and evaluation systems, and the ability to demonstrate food security impacts. The Previously Approved Activities (PAA) review criteria include a requirement to demonstrate that ***adequate progress towards achieving results is being made as evidenced through FY 95 and FY 96 reporting documentation and, more recently but to a lesser degree, R2/R4 reviews.*** The FY 97 Development Activity Proposal (DAP) review criteria include the requirement that the ***proposal provides a solid plan for M&E, that includes realistic benchmarks, measurable indicators of impact, and a system to collect and analyze data and modify the activity based on lessons learned.***

USAID advances in meeting G.A.O. concerns were reflected in the 1995 G.A.O. Review of Actions Taken to Improve Food Aid Management. The G.A.O. found that USAID has fully implemented the recommendation to establish clear guidance on how food aid programs enhance food security. The G.A.O. concluded that USAID has partially implemented the recommendations on monitoring and evaluating impact and collecting

data for evaluation. As part of the effort to address the latter recommendation, FFP has developed a strategic framework and list of indicators for monitoring and evaluating the impact of development food aid programs on food security. BHR has distributed the final draft of the proposed Title II generic indicators. For Title II activities approved in FY 96 and FY 97, Cooperating Sponsors, with the Mission team, will be asked to submit a revised M&E plan incorporating these indicators.

MODULE 3

Definition of a Food Security Analytical Framework

Objectives:

- Define the dimensions of food security—availability, access and utilization—according to USAID definitions
- Provide a framework for understanding food security constraints in various program contexts
- Define ‘vulnerability’ as an aspect of food insecurity

USAID Food Security Definition

When all people at all times have both physical and economic access to sufficient food to meet their dietary needs for a productive and healthy life

Dimensions of food security:

Food availability: sufficient quantities of food from household production, other domestic output, commercial imports or food assistance

Food access: adequate resources to obtain appropriate foods for a nutritious diet, as determined by household income levels and its distribution, as well as food prices

Food utilization: proper biological use of food, requiring sufficient energy and nutrients, potable water, and adequate sanitation, as well as knowledge of food storage and processing, basic principles of nutrition and proper child care

Causes of Food Insecurity

- Chronic Poverty
- Rapid Population Growth
- Declining Per Capita Food Output
- Poor Infrastructure
- Ecological Constraints
- Limited Arable Land
- Inappropriate Policies

- Disease, Poor Water and Sanitation, Inadequate Nutritional Knowledge
- Civil War and Ethnic Conflicts

Understanding Food Insecurity

- *How do households obtain their food?*
- *What are the factors that limit the ability of households to obtain food from each of these sources?*
- *How do households obtain their cash income?*
- *What are the factors that limit the ability of households to obtain income from each of these sources?*
- *What are the factors that limit how well households use their food to meet their dietary/biological needs?*
- *Who are the most vulnerable population groups?*

Food Security Conceptual Framework Diagram

Definition of Vulnerability

Vulnerability does not equal poverty

Vulnerability is defined as the likelihood that a population group will experience a drastic decline in their food access.

Vulnerability implies that households are exposed to risks which threaten their production, incomes and consumption. It further implies that households are unable to adjust to (or cope with) those threats in order to protect their food access.

Small Group Activity 1: Assessing Food Security Conditions

MODULE 4

Defining a Strategic Framework and Program Objectives

Objectives:

- Present the USAID strategic framework for performance measurement and define key terms
- Discuss the development of program objectives linked to food security impacts
- Discuss the integration of performance benchmarks in a program strategy

Outline of a Strategic Framework

- Program Goal

The highest level of development result which represents the ultimate purpose for achieving one or more objectives in a strategic plan.

- **Strategic Objective**

A significant, measurable development result which can be achieved, or toward which progress can be made, and for which the operational unit is held responsible.

- **Intermediate Result**

- A measurable outcome of one or more activities which contributes to achieving a higher-order strategic objective.

- **Program Activity**

- A specific program component, the outputs of which are designed to contribute to clearly defined results and objectives.

Framework Hierarchy

Strategic Framework Example from USAID/India



Well-Defined Program Objectives

Well-defined program objectives should describe:

- a single significant development impact
- realistic benchmarks given resource availability and implementation schedule
- tangible and measurable results
- beneficiary-level food security impact

Setting Program Benchmarks

Setting realistic and measurable benchmarks requires the ability to link the level of budgetary resources to expected quantities of outputs and, in turn, linking program outputs to a degree of expected change in the capabilities and well-being of beneficiaries.

- Does previous research provide evidence of the relationship between program outputs and impacts in similar program contexts?
- Degree of change often depends on baseline levels of impact measures.
 - change is typically more difficult to achieve at both extremes, where conditions are either very poor or very good.
- Will it be possible to measure the degree of change with confidence?

- does performance target lie within the confidence intervals defined by evaluation survey design?

Small Group Activity 2:

Refining Program Objectives

Again, break up into small groups according to program components (same groups as in small group activity 1)

- Review the food security constraints in the PVO program area as defined in Small Group Activity 1
- Prioritize the constraints in order of their relative severity
- Assess whether the current program activities address priority food security constraints in the program areas
- Determine whether current objectives and benchmarks are realistic, measurable, and related directly to food security impacts
- Suggest possible revisions to the program objectives where necessary

MODULE 5

Program Stakeholders and Information Needs

Objectives:

- Identify program stakeholders
- Discuss program decision-making tasks and information needs
- Define various food security information systems

The Returns to Information

Access to information provides the ability to:

- understand problems at the program level and at the population level,
- define solutions to program specific or to population specific problems,
- influence decision-making to effect positive change in program implementation and intended program outcomes

Decision-makers/Stakeholders in Information Systems

- Government Officials
- Donors
- PVO Administrators
- Program Managers
- Program Staff
- Program Beneficiaries

An effective information system supports decisions and actions made at all levels within the program

Program Decision-making

- Advocacy
- Funding/Resource Allocation
- Management
 - Personnel
 - Logistics
 - Financial
- Planning
- Direct Action/Intervention
- Troubleshooting
- Beneficiary Needs Assessments
- Beneficiary Screening/Targeting
- Performance Evaluation

Food Security Information Systems

- Vulnerability Assessments
 - analysis of determinants of food insecurity and vulnerability by location and population group
- Needs Assessments
 - links understanding of food insecurity and vulnerability to the design of relief and development interventions
- Targeting Systems
 - identification of most food insecure or vulnerable regions and/or population groups for participation in relief and development interventions
- Early Warning Monitoring
 - periodic assessment of factors which influence availability, access and utilization
 - used to predict future changes in food security status and alert for the need to adjust on-going interventions or initiate new interventions to meet food security threats
- Program Monitoring
- Impact Evaluations
- Efficiency (Cost) Evaluations

Large Group Activity 1: Identify Stakeholders and Information Needs

On a flip chart or blackboard, have workshop participants list the PVO program stakeholders, describe their role in program decision-making and discuss their specific information needs. Which types of food security information systems might be required to address those information needs?

Information Needs, Dissemination and Use

MODULE 6

Overview of M&E Definitions and Conceptual Framework

Objectives:

- Present a conceptual framework for program monitoring and evaluation
- Define program output, impact and other key terms, and differentiate between outputs and impacts
- Discuss the complementary relationship between program monitoring and impact evaluations
- Introduce intervention diagrams as a means to communicate program activities, outputs and intended impacts

The Uses of M&E Systems

M&E systems support efforts to improve:

- management and administration
- the assessment of program changes
- delivery of services
- accountability
- program planning and policy development
- resource allocation decisions

Key Questions Answered by M&E Systems

- Does the program...
 - increase access of the target population to program services?
 - improve community participation in the program?
 - improve the quality of care to clients?
 - deliver the expected volume of services?
 - achieved an acceptable ratio of cost per unit of output?
- Has the desired change occurred at household level?
- To what extent can observed changes be attributed to the program?
- Which program inputs and activities have the greatest impact on the population?

Program Monitoring

- establishes that program inputs, activities and outputs have occurred
- tracks progress over time in the access to and quality of services by beneficiaries
- tracks progress in terms of expected impacts of the program on the behavior and well-being of beneficiaries
 - monitoring cannot attribute cause and effect, which is the role of impact evaluations
- useful for improved management, administration, accountability, and as an initial basis for assessing impacts

Questions Answered by Program Monitoring

- Were the scheduled activities carried out as planned?
- How well were they carried out?
- Did the expected changes occur at program level, in terms of:
 - improved access to services,
 - improved quality of services,
 - improved use of services by beneficiaries?
- Did the expected change occur at household and individuals levels (again, monitoring cannot attribute these changes to the program)?

Impact Evaluations

- gauge the extent to which a program causes change in behavior and well-being at the population-level
- the assessment of impact necessarily implies attribution of population impacts to program outputs
- impact evaluations are useful in assessing the effectiveness of programs, their relevance to the issues of concern and in future program design

Questions Answered by Impact Evaluations

- Is the program effective in achieving its intended goals?
- Can the results be explained by some alternative process that does not include the program?
- Is there a link between impact at the population level and the activities of the program?

Efficiency (Cost) Evaluations

Examine whether the best use is being made of available resources, whether costs can be reduced or benefits extended for the same cost and whether the program is financially viable and sustainable

- Questions answered by efficiency evaluations:
 - What are the costs to deliver services to program participants?
 - Is the program an efficient use of resources as compared to alternative allocations?

Complementarity between Monitoring and Evaluation

Components of M&E Strategy

- measurable program goals
- clearly specified M&E objectives
- program linked to conceptual framework
- cost-effective information system
- operational indicators

- focused analysis plan
- achievable implementation strategy

Program Components

INPUT PROCESS OUTPUT OUTCOME

Inputs refer to the set of resources that are the raw materials used in the program: finances, policies, personnel, facilities, equipment, and commodities

Processes refer to the set of activities in which inputs are used in pursuit of the program objectives, including management and supervision, training, logistics and information systems

Outputs refer to the results obtained at the program level regarding the quality and quantity of goods (commodities) and services (training, case management) delivered under the program

Outcomes are the results of the program at the beneficiary-level in terms of changes in behavior and well-being

Definition of Program Outputs

INPUT PROCESS OUTPUT OUTCOME

- Functional Area Outputs
 - measures of the number of activities conducted
 - number of training sessions, quantity of food delivered to distribution points
- Service Outputs
 - measures of access to services and the quality of services
 - number of schools/health centers, average distance to health center or water source for target population, measures of knowledge and practice of health worker
- Service Utilization
 - measures of demand for services
 - numbers attending training sessions, numbers fed, numbers employed in FFW project

Definition of Program Outcomes

INPUT PROCESS OUTPUT OUTCOME

Focus on Impact

Diagrams

Small Group Activity 3:

Again, break up into small groups according to program components, as in small group activities 1 and 2.

For each PVO program component, identify program inputs, processes/activities, outputs, and impacts according to definitions presented

- ♦ Describe impacts in terms of the food security framework (availability, access and utilization) presented in Module 2
- ♦ Review program goals and objectives and assess their relationship to the program impacts defined above

Worksheet for Small Group Activity 3

MODULE 7

Selection of Food Security Indicators

Objectives:

- ♦ Define food security indicators and outline the process of indicator construction
- ♦ Differentiate the construction and use of indicators in various types of information systems
- ♦ Describe criteria to assess the utility of indicators for program monitoring and evaluation

What Is a Food Security Indicator?

Food security indicators are summary measures of one or more of the dimensions of food security for a target population.

- ♦ Indicators are constructed from a set of observations of food security-related conditions or behavior.
- ♦ The process of indicators construction includes:
 - measuring relevant behaviors or conditions,
 - calculating a variable on the basis of a set of measurements,
 - classifying individuals in a population according to their food security status,
 - aggregating the number of individuals in each food security class, and
 - providing perspective by expressing the aggregate variable as a percentage of the target population.

Identifying Food Security Indicators

- ♦ Identifying indicators requires linking the food security framework to the:
 - local context: indicators of interest in one location for one socioeconomic group may not be appropriate in other contexts
 - subject matter of interest: food security is a complex subject with many aspects which requires efforts to focus analysis on relevant issues

The food security framework establishes relationships between the *determinants* of food security and expected food security *outcomes*

- helps identify process and outcome indicators
- minimizes the risk of spurious/misleading results
- helps identify possible confounding factors

Operationalizing Indicators

Operationalizing indicators requires establishing the procedures for the *measurement* of indicators and *criteria* to interpret them

- ◆ The utility of indicators is determined by whether they are:
 - well-defined
 - relevant to context
 - measurable
 - inexpensive/available
 - easily aggregated/disaggregated
 - credible

Use of Food Security Indicators

- ◆ Targeting
 - indicators should reflect the priorities for selection criteria for the program
 - indicators may be static/structural in nature, but may include “snapshots” of more dynamic indicators
- ◆ Monitoring
 - routine observation of both process and outcome indicators at regular intervals
 - indicators must be dynamic and sensitive enough to identify changes in conditions over relatively short periods
- ◆ Evaluation
 - indicators should relate to the objectives, structure and implementation of the program
 - indicators must be sensitive enough to capture changes over the life of the project, but may also include more static indicators which represent possible confounding factors

Small Group Activity 4:

Identifying Impact Indicators

Again, break up into small groups, as in activities 1, 2 and 3. For each program component and impact identified in small group activity 3, identify the most appropriate impact indicator.

Discuss also:

- the most likely source of information for each indicator (program monitoring, evaluation survey, other)
- the individuals or groups responsible for collecting that information, and
- the frequency of data collection efforts necessary to meet decision-making needs and reporting requirements.

Worksheet for Small Group Activity 4

MODULE 8

Data Collection Strategies

Objectives:

- Differentiate between information needs to understand impact and to demonstrate impact
- Discuss the use qualitative information in program management and the role participatory evaluation methods
- Introduce various quantitative evaluation survey designs and criteria to use in selecting evaluation methods

Much of the material from this section is derived from Bertrand, J, et al (1995). Strategies for Family Planning Program Evaluation. Tulane University for the USAID EVALUATION Project.

Importance of Data Collection Methods

The focus on identifying impact indicators is important as a means of defining clear program objectives and of focusing program activities to ensure positive change in the capabilities and well being of beneficiaries.

However, the ability to use those indicators effectively for decision-making depends not only on their definition, but especially on how that information is collected.

Rigorous data collection strategies are required to:

- guarantee accurate and consistent measurement
- obtain an understanding of cause-effect relationships between program outputs and impacts
- control for possible distortion of program impact from external confounding factors

- ensure that the PVO obtains credit for the full extent of program impact

Impact Revisited

Evaluation Design

The strategy used to isolate the impact of a program from external factors and achieve some degree of attribution is called the evaluation design.

Evaluation designs can be based on a combination of data types from various sources:

- secondary data from external sources
- qualitative data obtained using PRA methods as part of a participatory evaluation design
- quantitative data from formal surveys to support the use of various statistical methods in impact assessment

External Data Sources

Existing information from clinic-based growth monitoring, sentinel site surveillance, market price monitoring, national surveys and other sources are often useful to support program evaluations:

- provide information on external confounding factors, such as prices and rainfall
- assess pre-implementation trends in key indicators
- focus definition of target groups and construct estimates of program coverage (i.e. from census data)
- for very large programs, national survey information may permit some direct analysis of program impact

Typically difficult to link to program outputs and beneficiaries, therefore, doesn't directly support attribution of impact to program activities

Qualitative versus Quantitative Assessments

Difference between understanding impact and being able to demonstrate impact.

While quantitative information can provide important insights, in many instances a qualitative understanding of impact from well-designed PRA methods is often more useful to program staff than information from quantitative surveys.

Difficult to translate information developed through qualitative methods to program outsiders as a means of demonstrating impact definitively. Rigorous quantitative methods are often required to demonstrate impact and are necessary to donors as a means of comparing impact across programs.

Qualitative and quantitative information are complementary. Qualitative information is particularly useful in interpreting the results of quantitative surveys.

Participatory Evaluations

Provide beneficiaries important input in program design and management

Involves local program staff in the evaluation process

Improves communication between program management, program staff and program beneficiaries

Provides useful lessons learned based on both problematic and successful aspects of program implementation process

Types of participatory evaluations:

- ♦ process evaluations
- ♦ outcome evaluations

Participatory Rural Appraisal (PRA)

- ♦ Variety of methods, including:

direct observation, focus group discussions, key informant interviews, wealth ranking, preference ranking, village mapping, trend analysis, seasonal calendars, flow diagrams, transect walks

In addition to participatory evaluations, PRA methods are valuable for special studies to improve program design and management and better understand impact

- ♦ PRA methods are also critical first step to identify the parameters of quantitative (baseline and final) evaluation surveys

Quantitative Impact Assessments

Measuring impact requires more than merely monitoring changes in outcome variables. It requires plausible evidence that an observed change in outcome variables is attributable to the program intervention.

There are a number of ways to measure program impact, which differ according to:

- types of outcome measures used,
- number and types of assumptions required,
- strength of possible conclusions regarding program impact,
- operational and data requirements

Criteria for Selecting Among Alternative Methods

- threats to the validity of measurements
- assumptions required
- ability to isolate program effects
- cost
- data requirements
- insights into causal pathways
- types of outcome indicators used

Trend Comparisons

requires measurement of impact indicator for a significant period prior to program implementation, in order to estimate pre-implementation trend.

requires repeated measurement of impact indicator during and after implementation, in order to estimate post-implementation trend.

Comparison Group Evaluation Design

Measures differences in food security indicators between program participants and non-participants (as a control) in order to determine impact.

- Can be undertaken as a single ex post evaluation.
- Somewhat expensive, since need for comparison group increases the number of observations required in the sample.
- Biases in the selection of participants may influence measures of impact indicators for each group.
- Often difficult to select appropriate comparison groups to serve as effective controls.

Reflexive Evaluation Design

Measures changes in food security indicators for program participants over time, such as the period between a baseline and final evaluation, as a means to determine impact.

Doesn't control for common temporal variability in many food security indicators, such as annual variations in crop yields due to rainfall.

- Somewhat expensive, since requires at least 2 surveys (baseline and final) to enable comparisons over time.
- Relatively simple sample design, since no controls or comparison groups are required.
- Requires some understanding of which communities will be included in the program prior to the baseline survey.

Mixed Comparison Group/ Reflexive Evaluation Design

Measures differences between the change in food security indicators over time for participants and non-participants in order to determine impact. Often called pre-test/post-test non-equivalent control group design.

Minimizes the implications of temporal variability in impact indicators, as well as implications of biases in the selection of comparison groups.

- Expensive, since requires at least 2 surveys (baseline and final) on a larger sample (participants and non-participants).
- Requires some understanding of which communities will be included in the program prior to the baseline survey.

Typically provides a much more rigorous analysis of impact than examples above and is a frequently recommended evaluation design

Relating Program Design to Evaluation Design

Many elements of the program design, such as the definition of program area, plans to expand program coverage to new villages and segments of the population, and others may have implications, not only for the extent of program impact, but also for the ability to measure that impact. In fact, the need to demonstrate impact and the information requirements to do so may in themselves suggest changes to the PVO program design.

For example, where the program is anticipated to expand into new villages over the life of the program, and where a reflexive group evaluation design is preferred, it may be necessary to identify those new villages in advance of the baseline survey in order to ensure proper comparisons.

Indicators of Beneficiary Participation Levels

Using household survey data, it is possible to relate impact to the degree of beneficiary participation, to assess the effects of individual program components.

- Supports resource allocation decisions by highlighting the most effective program components.
- Allows for the measurement of the impact of the integration of various intervention types.

When linked to demographic and socioeconomic information, highlights the determinants of program participation, leading to strategies to improve program coverage.

Measures should capture types of participation (participation in training sessions versus clinic visits), as well as intensity of participation (number of training sessions attended).

Integrating Program Monitoring Information into Impact Evaluations

Using program monitoring data, it may also be possible to understanding linkages between specific program outputs and program impacts.

- Provides some insight into causal pathways through which outputs influence impacts.
- Allows for some assessment of the effect of differences in the quality of program implementation across communities.
- Supports resource allocation decisions by highlighting the most effective program components.
- Requires the ability to link survey respondents to specific service delivery points.
- May require a fairly large number of communities included in the evaluation survey.

Tips on Data Collection

Data should be collected:

- Only if it is directly relevant to program activities and objectives
- Only if it is useful for decision-making by program stakeholders
- As close as possible to the level where actions will ultimately be taken to improve program management and response
 - data quality is typically best when it is collected by those who ultimately will use it for their own decision-making needs

Types of Data Uses

Large Group Activity 2: Identifying an Appropriate Evaluation Design

In the large workshop group, review the impact indicators, data collection methods and frequency discussed in small group activity 4. List them for the group on a flip chart or blackboard.

For each indicator, discuss whether comparison group, reflexive group, mixed, or other evaluation design would be most appropriate.

- Is there a natural temporal variability or other characteristic of the indicator that might suggest a comparison group design?
- Are there other factors which might suggest reflexive group design?
- How would comparison groups be defined and identified (on the basis of what criteria and what information source)?

For which of the program activities that contribute to impact would household-level participation indicators be useful to gain a better understanding of that impact? How would that information be used in program decision-making?

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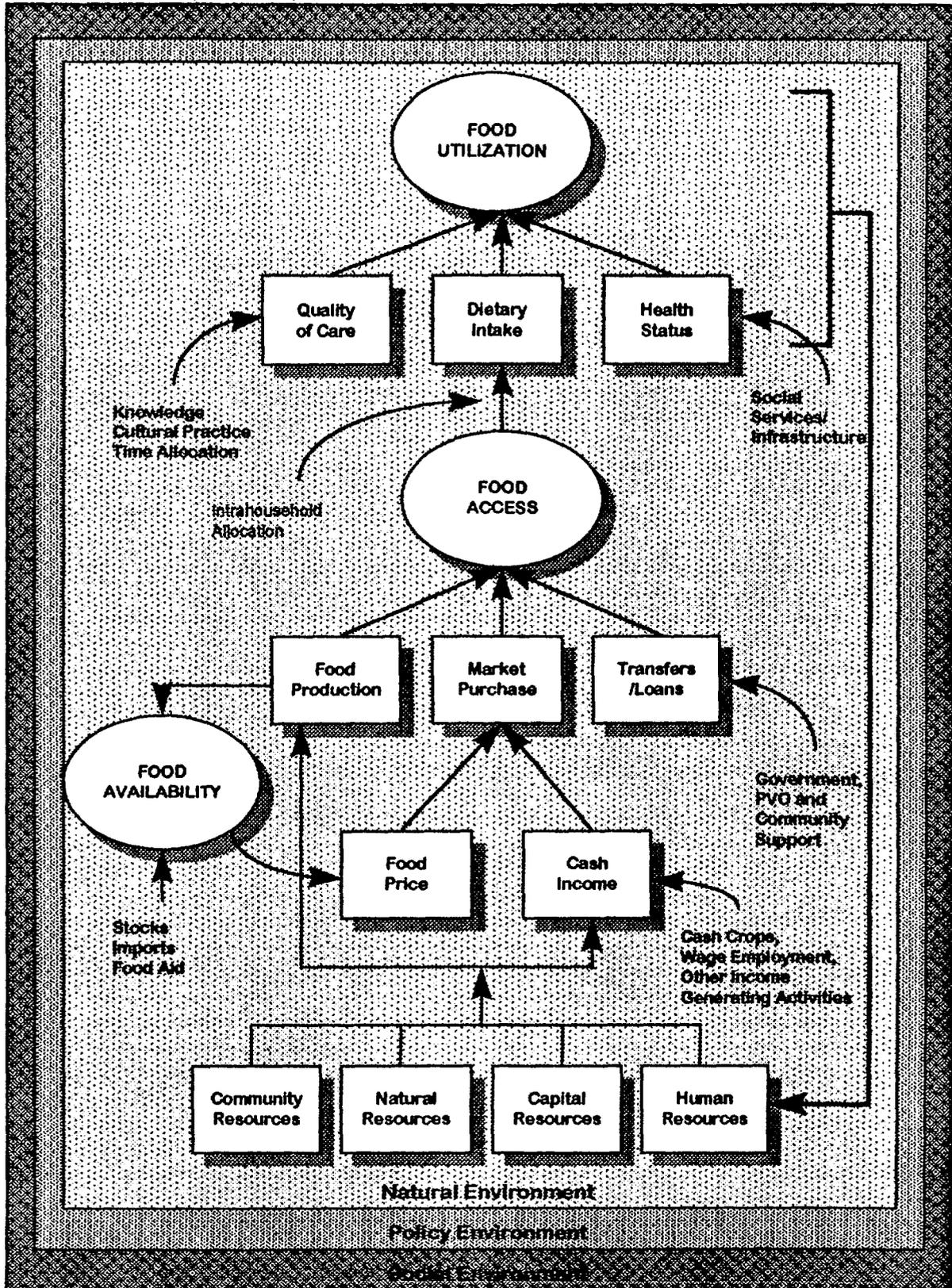
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Food Security Conceptual Framework



Riely, Cogill and Bailey (1996).

Strategic Framework
Objective Tree
USAID/India

Target of opportunity:
AIDS Prevention and
Control

Sustainable Development

Sub Goals

- Accelerate economic growth
- Stabilize India's population
- Protect the environment

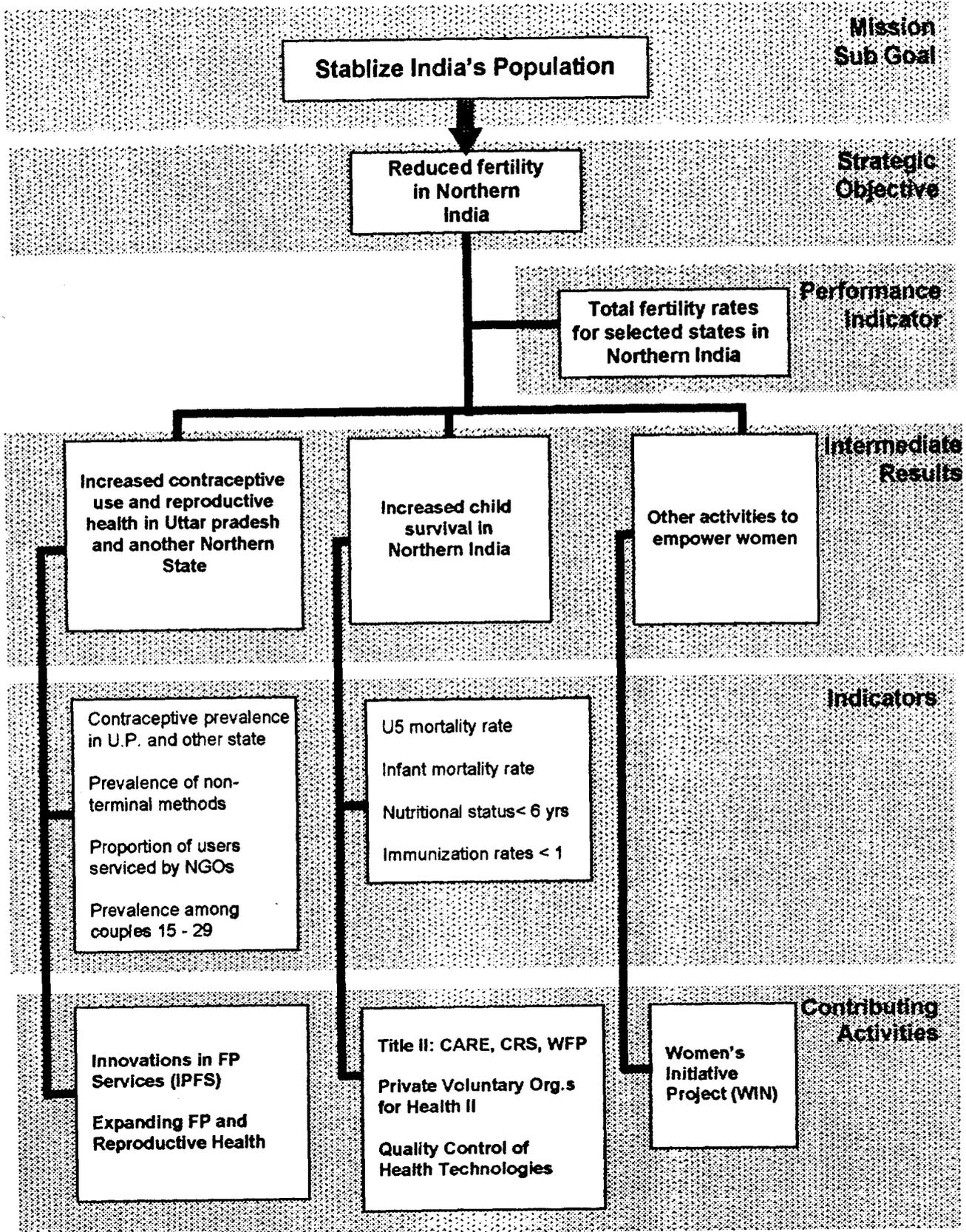
Strategic Objectives

- Increased competition and innovation in selected sectors (housing, finance, capital markets, agribusiness, and power generation).
- Reduced fertility in Northern India
- Environmental protection increased in targeted sectors.

Intermediate Results

- Expanded supply and access to
 - (a) credit for shelter
 - (b) capital market financing
- Improved policy and regulatory environment conducive to efficiency in selected areas.
- Increased contraceptive use and reproductive health in Uttar Pradesh and another northern state
- Increased child survival in North India
- Empower Women
- Increased energy productivity in selected power utilities and related service industries
- Improved air and water quality at selected industrial sites and municipalities
- Increased availability of germplasm

Population Strategy Objective Tree



Information Needs, Dissemination, and Use

Audience	Role	Which/Why	How
	<small>Role in evaluation and follow-up</small>	<small>Which results they need to get and why</small>	<small>How they can get the results</small>
Non-involved community	Small part (interviewed)	Summary of results to create support	Meetings, discussions, mass media.
Involved community	Planning, carrying out evaluation	Full results - to put recommendations into action	Participation, meetings, study of results, Mass media.
Program staff	Coordination, facilitation of decision-making and action	Full results - to put recommendations into action	Participation, meetings, study of report.
District-level agencies	Receive info. disseminate lessons, support action	Full results - or summary for lessons learned and decision-making	Full report, discussions w/ evaluators, mass media.
Regional-level agencies	Receive info. disseminate lessons, support action	Full results - or summary for lessons learned and decision-making	Summary, discussions, meetings.
National-level agencies	Receive info. disseminate, support action	Full results - or summary for lessons and decisions	Summary, discussions, meetings.
External funding agencies	Receive info. disseminate, support action	Full results - or summary for lessons and decisions	Full report plus summary discussions
International-level agencies	Receive info. disseminate, support action	Full results - or summary for lessons and decisions	Summary, discussions, meetings.

Riely, Cogill and Bailey (1996).

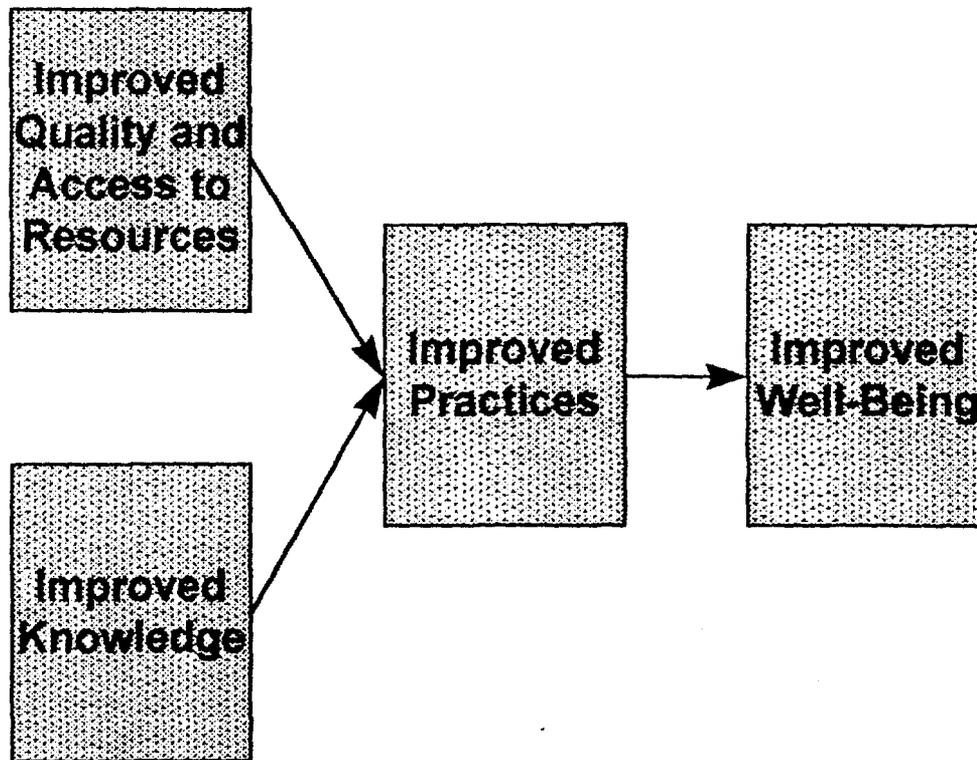
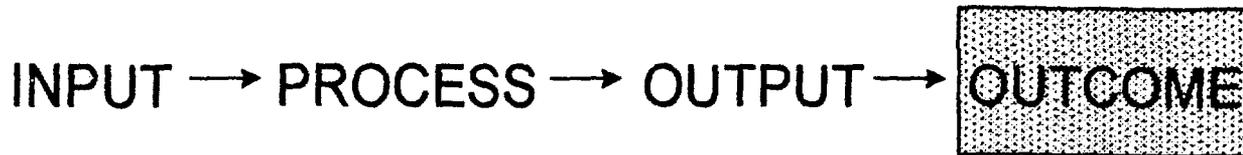
Complementarity between Monitoring and Evaluation

Item	Monitoring	Evaluation
Frequency	periodic, regular	episodic
Main action	keeping track/oversight	assessment
Basic purpose	improve efficiency, adjust work plan, accountability	improve effectiveness, impact, future programming
Focus	inputs, process outputs, work plans	effectiveness, relevance, impact, cost effectiveness
Information sources	routine or sentinel systems, field observation, progress reports, rapid assessments	same, plus surveys, studies
Undertaken by	program managers, community workers, community (beneficiaries), supervisors, funders,	program managers, supervisors, funders, external evaluators, community (beneficiaries),
Reporting to	program managers, community workers, community (beneficiaries), supervisors, funders,	program managers, supervisors, funders, policy makers, community (beneficiaries)

Derived from UNICEF (1991) A UNICEF GUIDE for Monitoring and Evaluation, New York

Riely, Cogill and Bailey (1996).

Definition of Program Outcomes



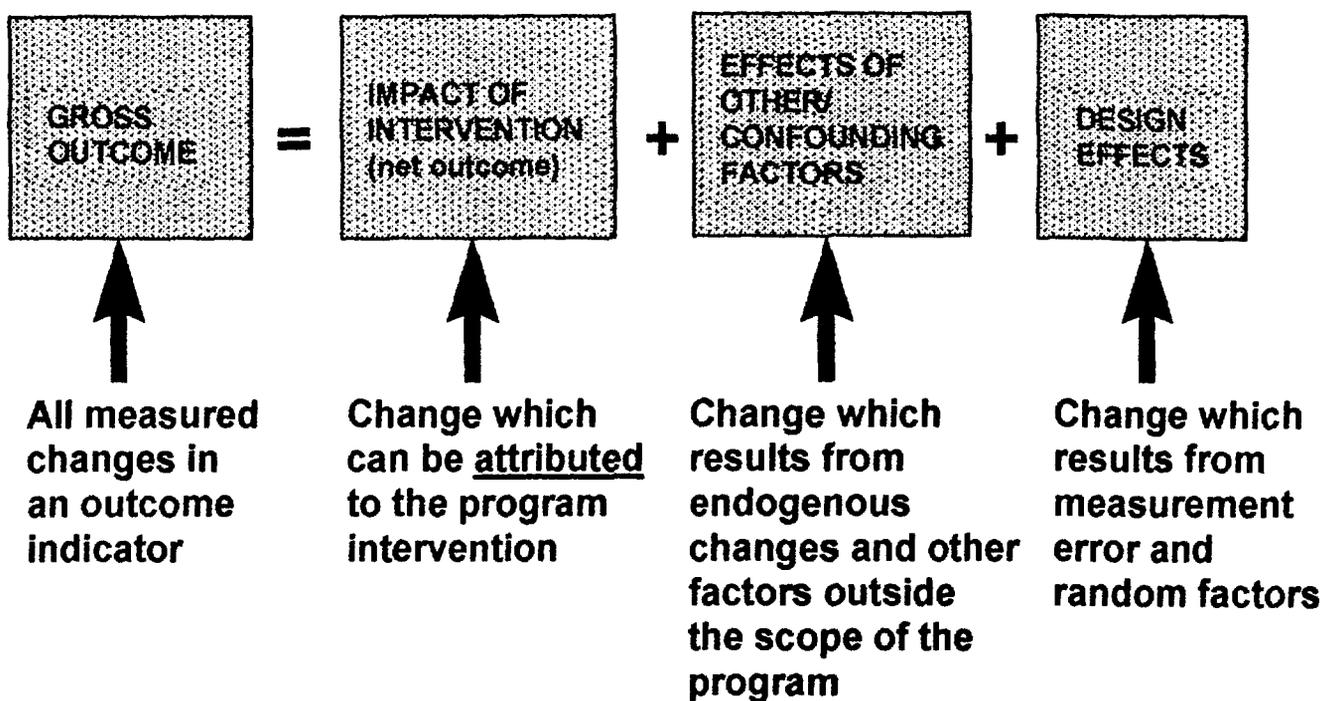
← **Effects on Capability** →

← **Impact** →

Riely, Cogill and Bailey (1996).

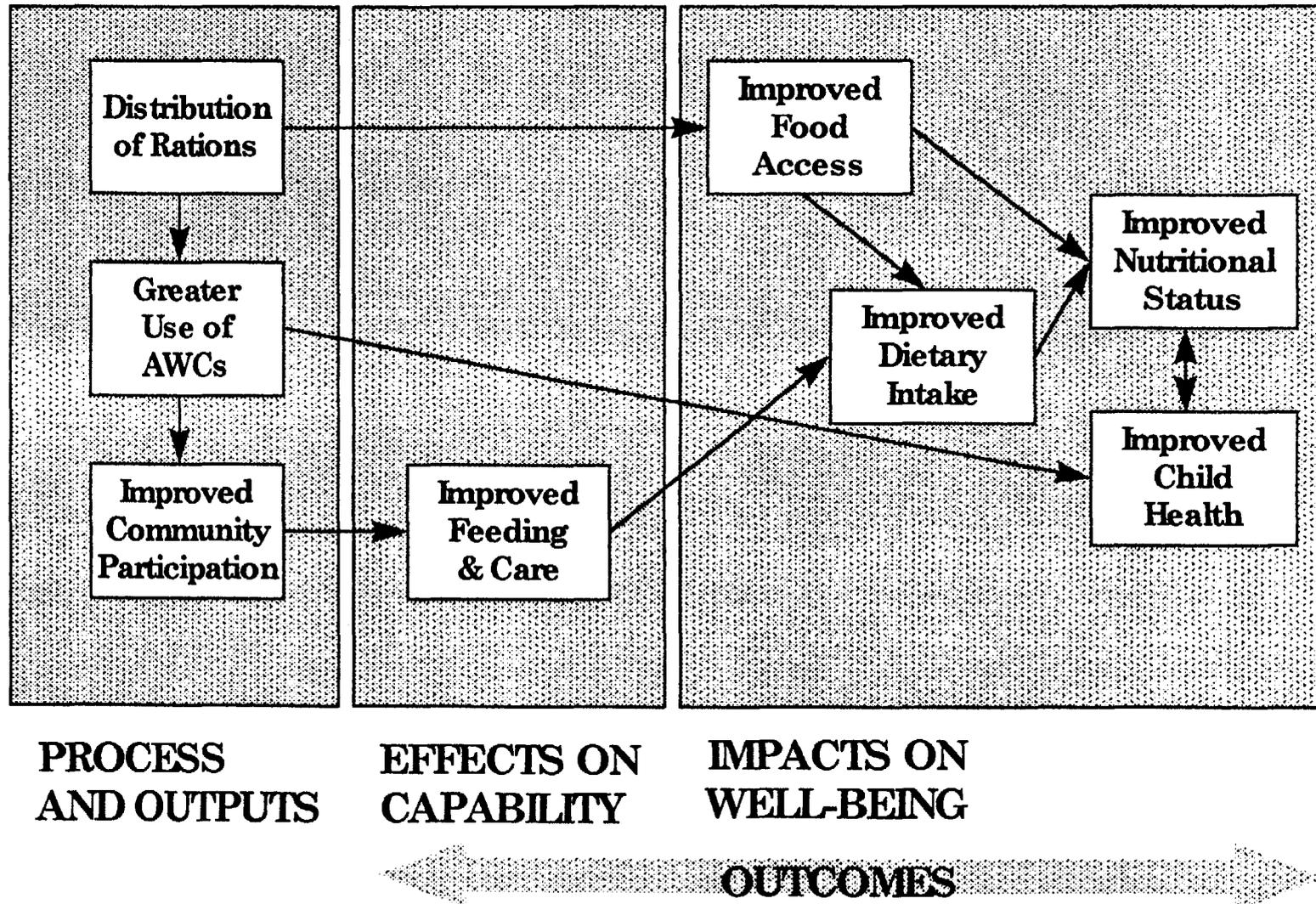
Focus on Impact

Analysis of impact suggests a focus on changes at the beneficiary level, rather than the program-level, that can be attributed to program activities.



Riely, Cogill and Bailey (1996).

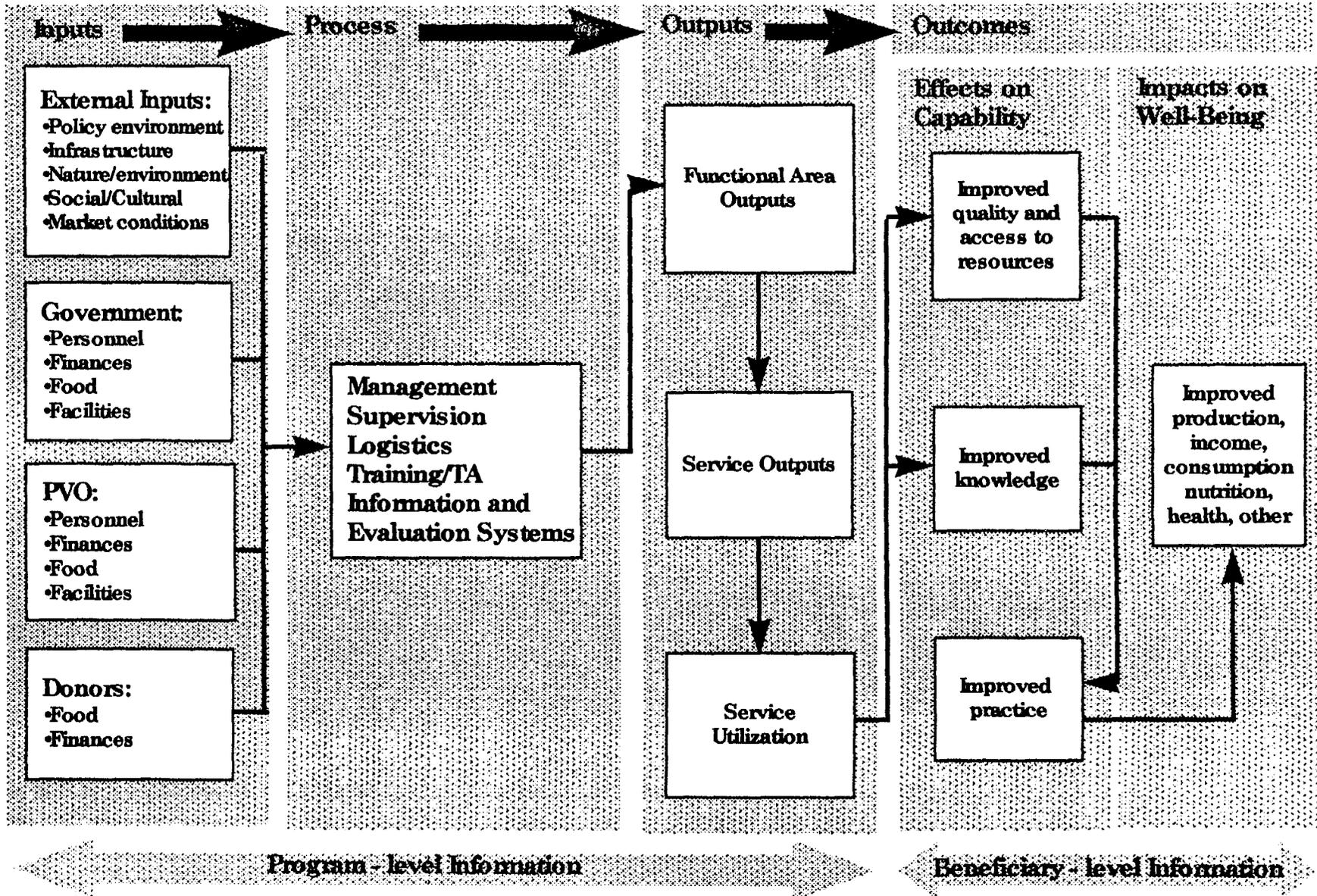
Intervention Model for Supplementary Rations under the INHP



Riely, Cogill and Bailey (1996).

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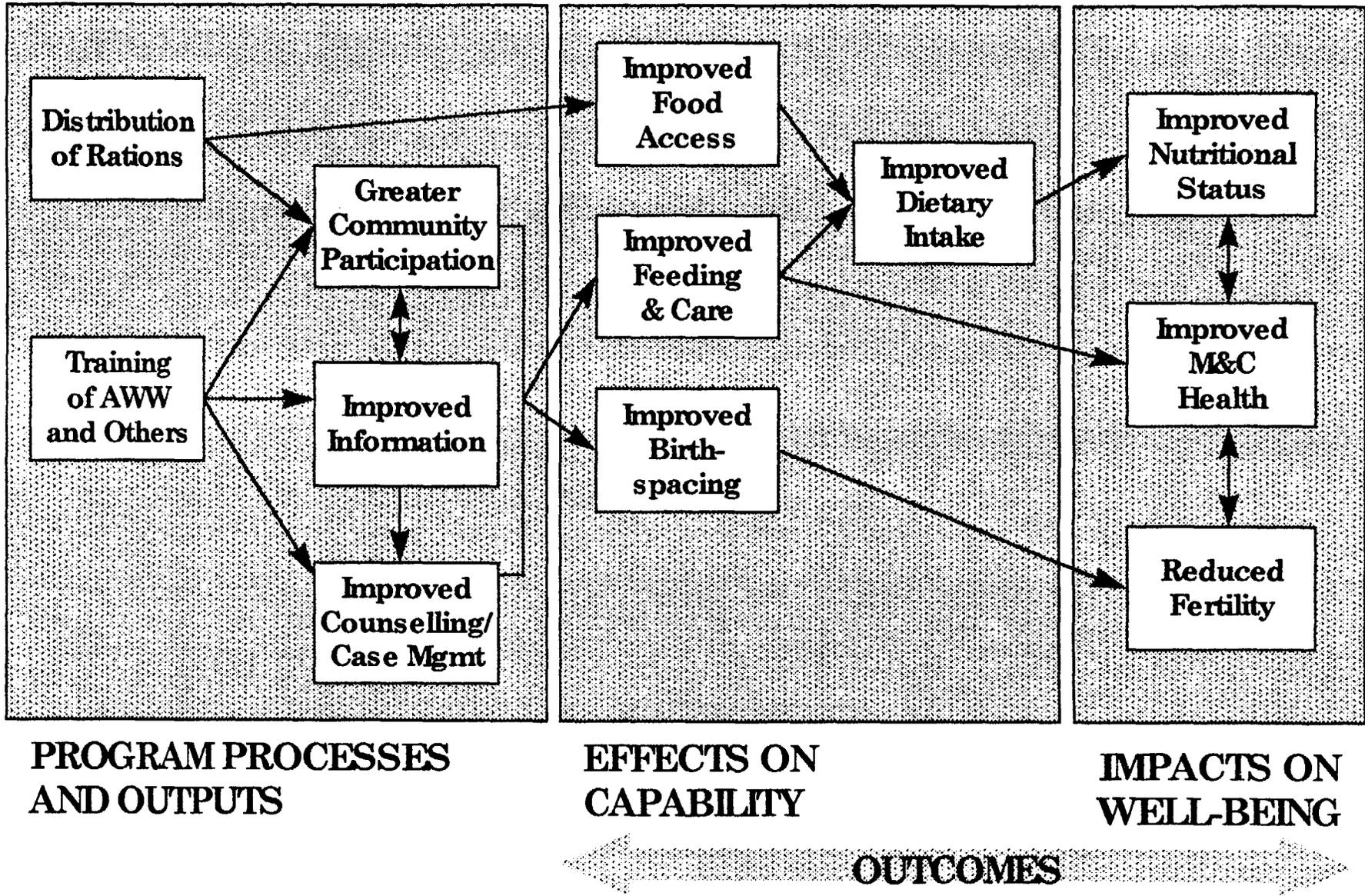
Framework for Conceptualizing M&E System Design



Riely, Cogill and Bailey (1996).

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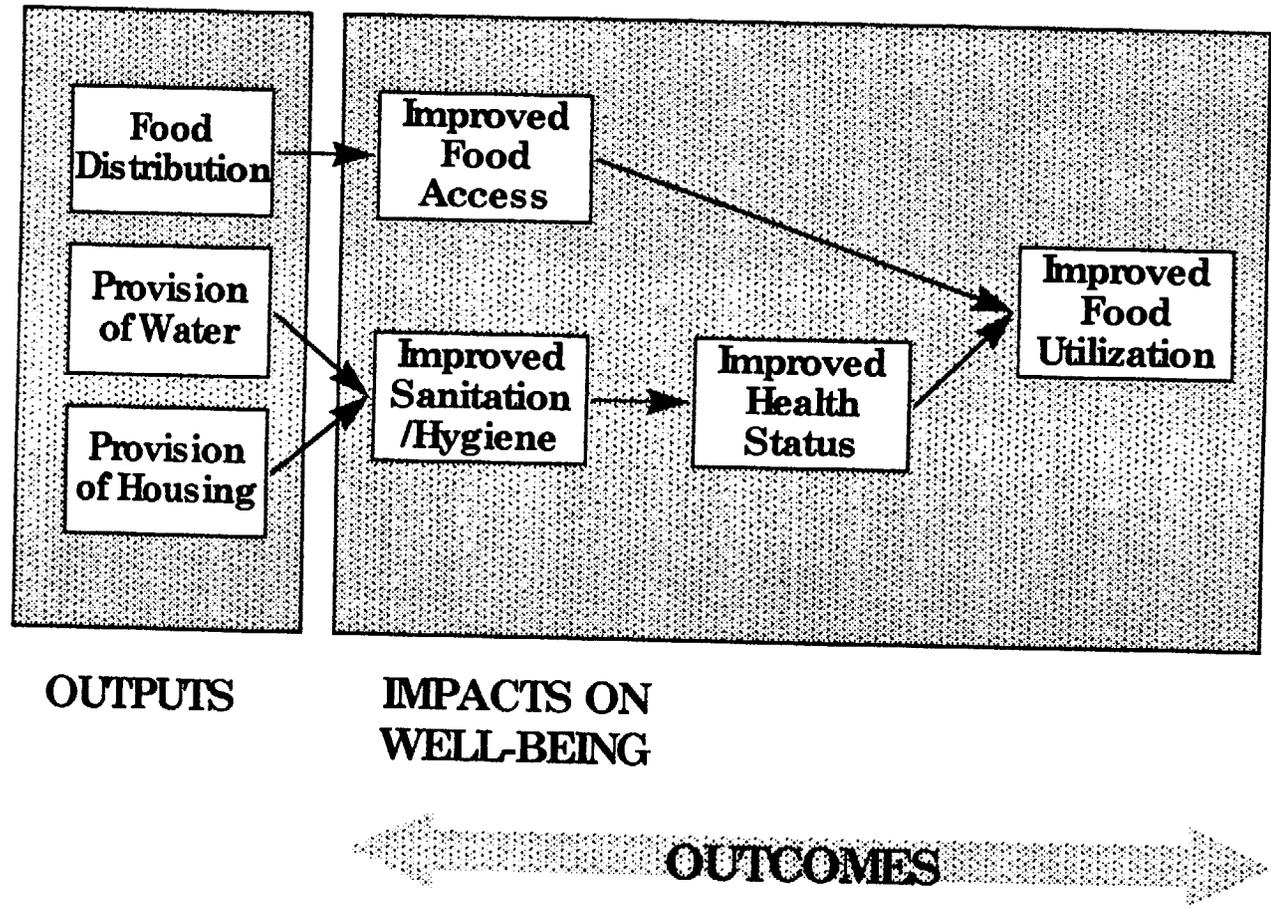
Intervention Model for the CARE/INDIA INHP



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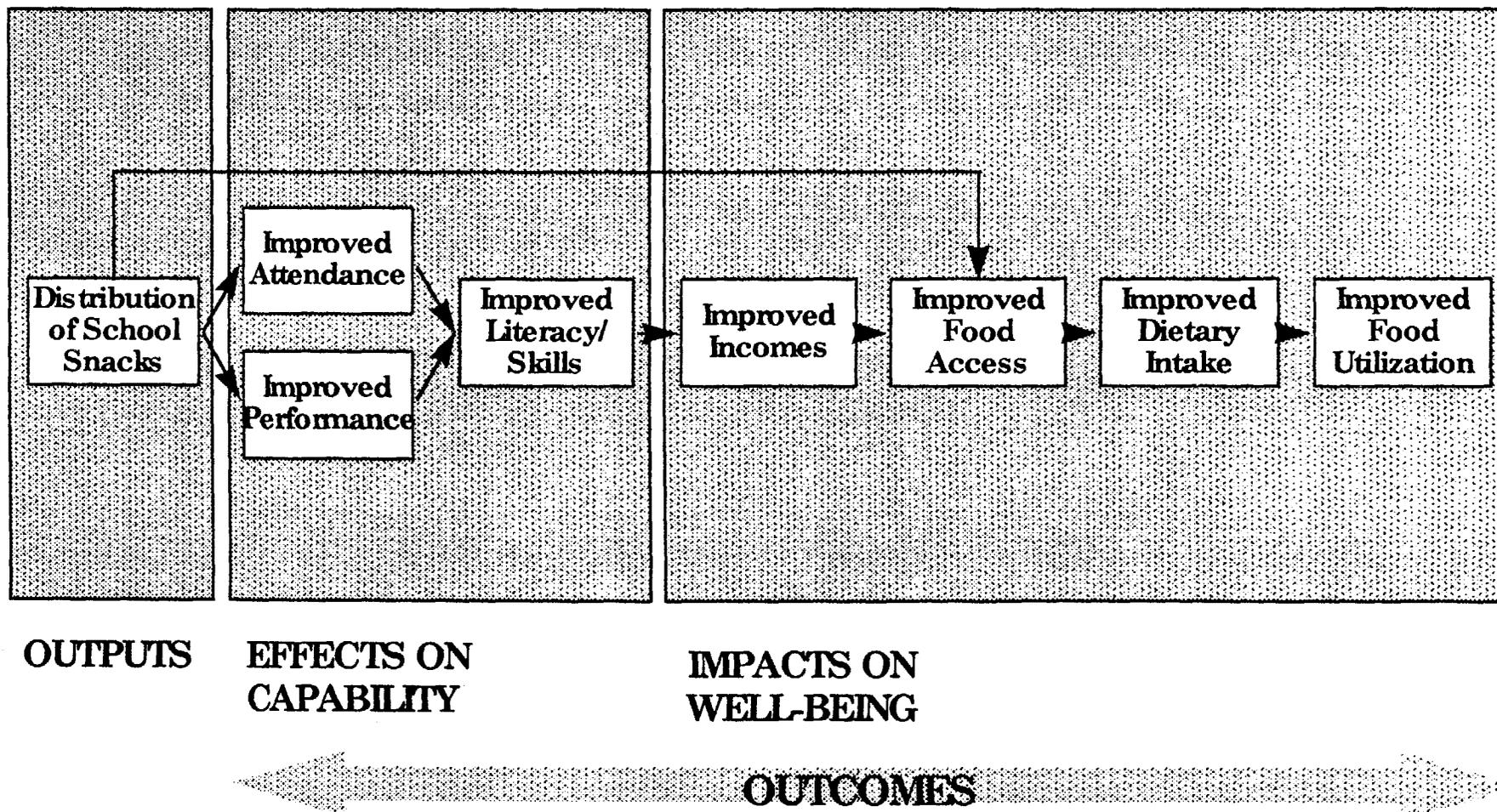
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Intervention Model for CRS/Eritrea Welfare Programs



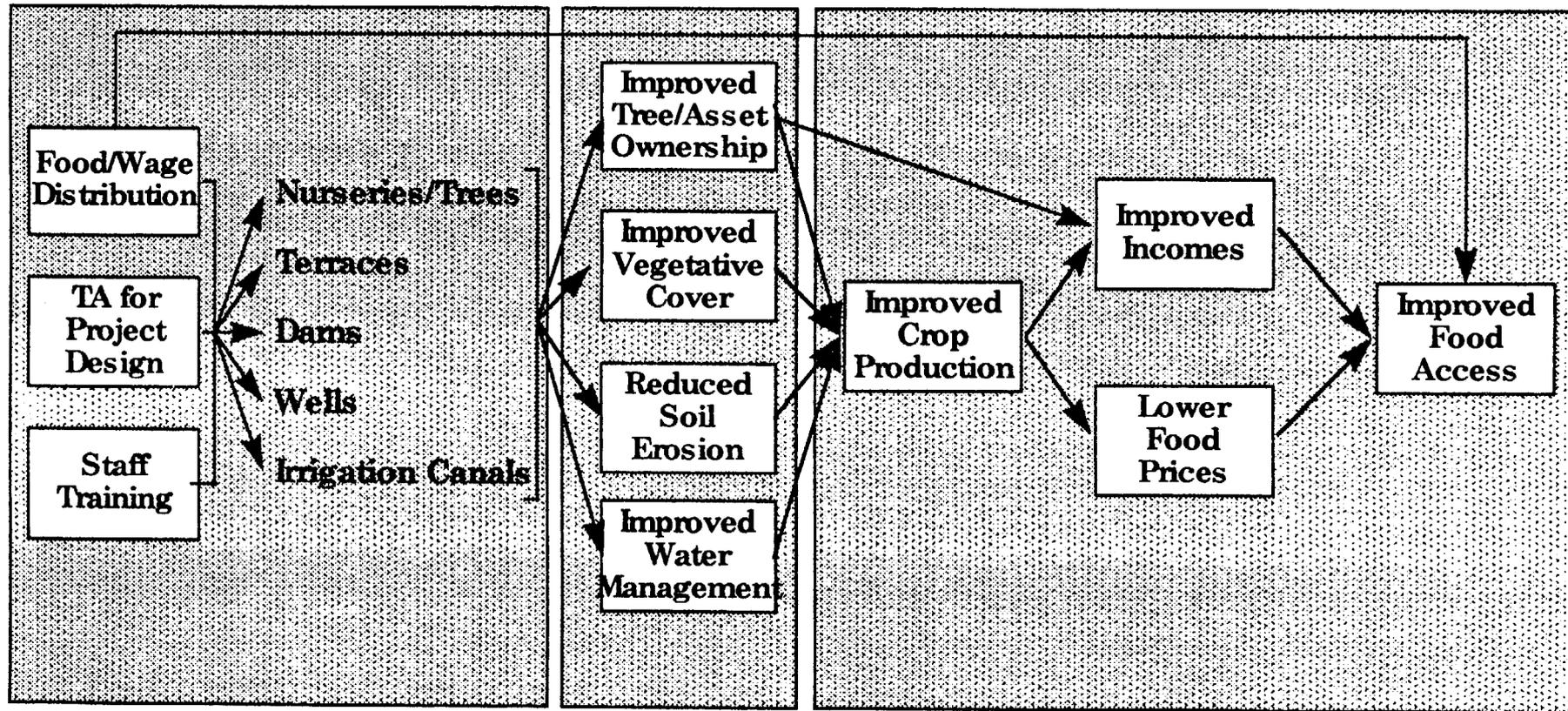
Riely, Cogill and Bailey (1996).

Intervention Model for CRS/Eritrea School Feeding Program



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Intervention Model for CRS/Eritrea Food-for-Work Program



OUTPUTS

EFFECTS ON CAPABILITY IMPACTS ON WELL-BEING

←----- OUTCOMES -----→

Riely, Cogill and Bailey (1996).

Worksheet for Small Group Activity 4:

Program Component: _____

Impact: _____

Indicators:	Data Source:	Collected By:	Frequency:

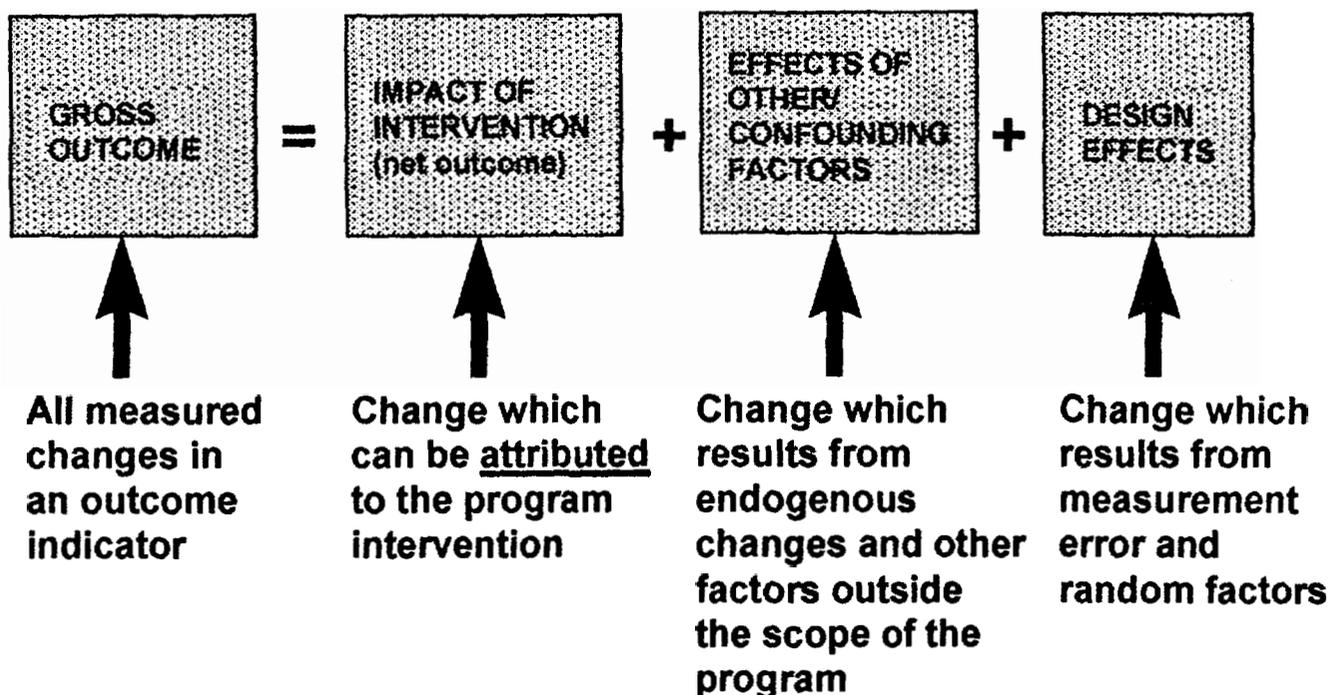
Impact: _____

Indicators:	Data Source:	Collected By:	Frequency:

Riely, Cogill and Bailey (1996).

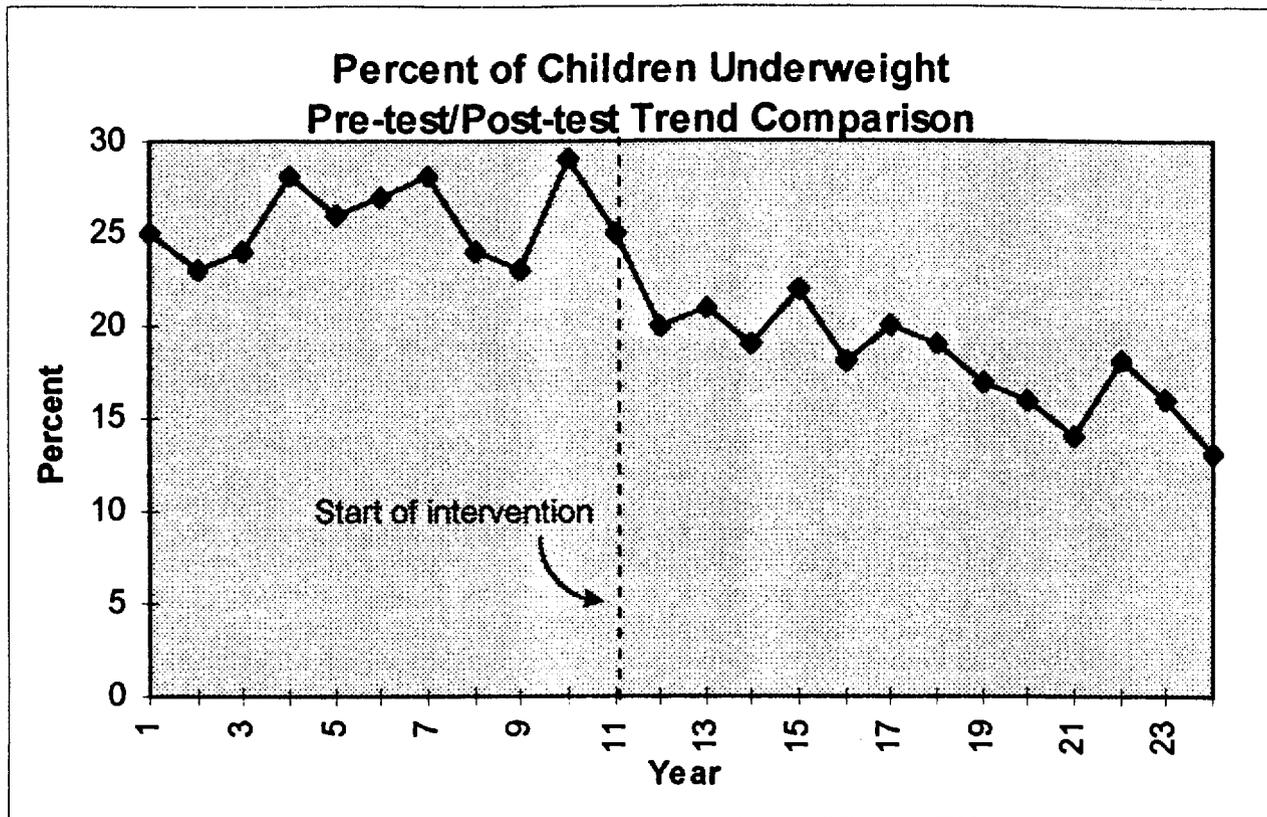
Impact Revisited

Again, the analysis of impact suggests a focus on changes at the beneficiary level, rather than the program-level, that can be attributed to program activities.



Riely, Cogill and Bailey (1996).

Trend Comparisons



- ◆ requires measurement of impact indicator for a significant period prior to program implementation, in order to estimate pre-implementation trend.
- ◆ requires repeated measurement of impact indicator during and after implementation, in order to estimate post-implementation trend.

Riely, Cogill and Bailey (1996).

Types of Data Uses, and Collection Method for Different Evaluation Focuses

Focus	Data type	Use	Collection Method
Input	Financial, material, personnel	Delivered to the project?	Administrative records
Output	Services provided and used	Reach target group?	Administrative records, PRA, surveys
Outcome/ Impact	Change in beneficiary status	Attributable to the program?	Routine reports, PRA, surveys, external sources
Efficiency	Costs of inputs, outputs, impacts	Most effect for the cost?	Cost-effectiveness comparisons

Derived from UNICEF (1991) A UNICEF GUIDE for Monitoring and Evaluation, New York

Riely, Cogill and Bailey (1996).