Project Cycle Management for International Development Cooperation

Problem tree, Objective tree

Nicola Brignani

p.67-71 of the ‘Project Cycle Management Guidelines’
Logical Framework approach

1. ANALYSIS

Current situation is analysed in order to design the image of the future “desired situation”. It will facilitate the identification of the appropriate strategies in order to reach the desired situation.

Objective: to guarantee that the project idea is relevant to the future situation desired.

2. PLANNING

The project idea is specified in a plan.

Objective: to guarantee the development of the project.
Logical Framework approach steps

ANALYSIS
✓ Stakeholder analysis
• Problem analysis
• Objective analysis
• Strategy analysis

PLANNING
• LF Matrix
• Activity scheduling
• Resource scheduling
Analysis of the problems

• To identify the negative aspects of an existing situation and establish the cause-effect relations between the identified problems. This exercise is aimed at:
  – Identifying the object of the analysis
  – Identifying the partners and stakeholders
  – Identifying and building the hierarchy of the problems
Problem tree

PROBLEM CONSEQUENCES

Current situation

PROBLEM

Problem cause

Problem cause

Problem cause

Problem cause
Problem tree

High infant and maternal mortality rates

High rates of infection among babies and infants

- Poor nutritional status of babies and infants
- Commercial pressures to use milk supplements

Few babies and infants vaccinated

- Poor seasonal availability of high protein foods

Birth complications diagnosed late or not at all

Low attendance at rural clinics

- Mothers unwilling to attend clinics
- Infrequent and inadequate coverage of clinics

High incidence of acute birth complications

High rates of post-partum and neo-natal infection

- Low standards of hygiene and patient care by staff
- Shortage of drugs
- Low staff skills

High infant and maternal mortality rates

- High rates of infection among babies and infants
- High incidence of acute birth complications
- High rates of post-partum and neo-natal infection

EFFECTS

CAUSES
Problem tree

Once complete, the problem tree represents a summary picture of the existing negative situation

In many respects the problem analysis is the most critical stage of project planning, as then it guides all subsequent analysis and decision-making on priorities (p.68)
Analysis of objectives

• This methodology allows:
  • To describe the future scenarios deriving from the problems’ solution.
  • To verify the objectives’ hierarchy.
  • To clarify in a diagram the means-ends relations.

The negative situations identified in the problem tree are transformed into positive and already reached situations.
Transformation of the problems into objectives

**Problem**  
- High infant and maternal mortality rates  
- High incidence of acute birth complications  
- Birth complications diagnosed late or not at all

**Objective**  
- Infant and maternal mortality rates reduced  
- Reduced incidence of acute birth complications  
- Increased/earlier diagnosis of birth complications
Objective tree

EFFECTS OF THE PROJECT

Expected situation

PURPOSE

Results

PURPOSE

Results

Results

Results
Objective tree

**MEANS**

- Mothers willing to attend clinics
- Increased and regular coverage by clinics
- Increased proportion of babies breast-fed
- Nutritional status of babies and infants improved
- Sufficient drugs available
- Improved staff skills
- Standards of hygiene and patient care improved

**ENDS**

- Infant and maternal mortality rates reduced
- Rates of post-partum and neonatal infection reduced
- Reduced incidence of acute birth complications
- Increased/earlier diagnosis of birth complications
- Attendance at rural clinics by mothers increased
- Seasonal availability of high protein foods increased
- Increased N. of babies and infants vaccinated
- Rates of infection among babies and infants reduced
- Nutritional status of babies and infants improved
- Infant and maternal mortality rates reduced

**Standards of hygiene and patient care improved**

**Rates of post-partum and neonatal infection reduced**

**Reduced incidence of acute birth complications**

**Increased/earlier diagnosis of birth complications**

**Attendance at rural clinics by mothers increased**

**Seasonal availability of high protein foods increased**

**Increased N. of babies and infants vaccinated**

**Rates of infection among babies and infants reduced**

**Nutritional status of babies and infants improved**

**Increased proportion of babies breast-fed**
Analysis of possible strategies

• The different groups of similar Objectives identified in the Problem tree become Strategies.

• The most appropriate and feasible strategy is selected on the basis of different criteria (priority, budget, timing).

• This phase requires therefore 2 steps:
  • **Definition** of the different strategies allowing to reach the project’s purpose.
  • **Choice** of the project’s strategy.
Analysis of possible strategies

Infant and maternal mortality rates reduced

Rates of infection among babies and infants reduced
- Nutritional status of babies and infants improved
  - Increased proportion of babies breast-fed
- Increased N. of babies and infants vaccinated
  - Increased availability of high protein foods

Reduced incidence of acute birth complications
- Increased/earlier diagnosis of birth complications
  - Attendance at rural clinics by mothers increased
- Increased and regular coverage by clinics
- Sufficient drugs available
- Improved staff skills

Rates of post-partum and neonatal infection reduced
- Standards of hygiene and patient care improved

Infant and maternal mortality rates reduced

Primary healthcare strategy
- Mothers willing to attend clinics
- Increased and regular coverage by clinics

Secondary healthcare strategy
- Increased N. of babies and infants vaccinated
- Nutritional status of babies and infants improved
- Increased proportion of babies breast-fed
- Seasonal availability of high protein foods increased

Nutrition strategy
The project aims at solving – or reducing – a definite problem

n.brignani@t33.it
Project Cycle Management for International Development Cooperation

Logical Framework tool

Nicola Brignani

p.71-81 of the ‘Project Cycle Management Guidelines’
Logical Framework approach

1. ANALYSIS

Current situation is analysed in order to design the image of the future “desired situation”. It will facilitate the identification of the appropriate strategies in order to reach the desired situation.

Objective: to guarantee that the project idea is relevant to the future situation desired.

2. PLANNING

The project idea is specified in a plan.

Objective: to guarantee the development of the project.
Logical Framework approach steps

**ANALYSIS**
- Stakeholder analysis
- Problem analysis
- Objective analysis
- Strategy analysis

**PLANNING**
- LF Matrix
- Activity scheduling
- Resource scheduling
Proposal formulation

• Logical Framework is a methodology allowing to check if the intervention is properly structured.

• It supports the implementation of monitoring and evaluation actions.
# Logical framework

<table>
<thead>
<tr>
<th>General objective</th>
<th>Verifiable indicators</th>
<th>Sources of verification</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project purpose</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Results</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activities</td>
<td>MEANS</td>
<td>MEANS</td>
<td></td>
</tr>
</tbody>
</table>
LF description

• The column **Intervention logic** indicates the contents of the project.

• The column **Indicators** gives the tools to verify if the objectives are reached and the results achieved.

• The column **Sources of verification** indicates what information have to be used in order to apply the indicators.

• The column **Assumptions** includes the external factors affecting (positively or negatively) the project’s implementation.
Intervention logic

The following hierarchy is designed:

- **GENERAL OBJECTIVE:** long term benefits for the society.
- **PROJECT PURPOSE:** benefits for the project’s beneficiaries.
- **RESULTS:** concrete services/goods made available by the project.
- **ACTIVITIES:** how the project’s services/goods will be delivered.
Vertical logic

• If-then logic:
  ✓ *If* the ressources are provided *then* the activities can be performed.
  ✓ *If* the activities are performed *then* the results are produced.
  ✓ *If* the results are produced *then* the project’s purpose is achieved.
  ✓ *If* the project’s purpose is achieved *then* the general objective is pursued.
Horizontal logic

• Indicators specify how the achievement of objectives and results can be verified and measured.

• They are established according to questions such as “How to realise if what I have planned has really happened or not?”

• There are not indicators without sources of verification.
## Intervention logic

<table>
<thead>
<tr>
<th>General Objective Level</th>
<th>Project purpose level</th>
<th>Results level</th>
<th>Activity level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant and maternal mortality rates reduced</td>
<td>Rates of infection among babies and infants reduced</td>
<td>Increased N. of babies and infants vaccinated</td>
<td>1.....</td>
</tr>
<tr>
<td></td>
<td>Reduced incidence of acute birth complications</td>
<td>Nutritional status of babies and infants improved</td>
<td>Attendance at rural clins by mothers</td>
</tr>
<tr>
<td></td>
<td>Rates of post-partum and neo-natal infection reduced</td>
<td></td>
<td>Increased and regular coverage by clinics</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mothers willing to attend clinics</td>
</tr>
</tbody>
</table>

- **OUT**
  - Improved staff skills
  - Attendance at rural clinics by mothers
  - Standards of hygiene and patient care improved
  - Improved staff skills
  - Increased and regular coverage by clinics
  - Mothers willing to attend clinics
Identifying the objective

• Once the Problem and Objective trees are designed and the possible strategies are identified, the project’s purpose (or specific objective) has to be chosen.

• If only one specific objective or purpose is chosen, the project is clearer.
Results, activities, assumptions

- Once the specific objective and the relevant strategy are chosen, the means-ends relations must be analysed again.
- “Results” and “Activities” have to be inserted in the Logical Framework.
- The elements that we have not inserted are out of the project. They can be considered as “assumptions”.
Indicators and sources of verification

• You will discuss with my colleague Alessandro Valenza
Assumptions

• Assumptions are external factors, which will affect the project’s implementation and long-term sustainability but lie outside its control.

• The probability and significance of these assumptions being met should be estimated as part of assessing the feasibility/riskiness of the project.
Assumptions

Is the assumption important?

- **Yes**
  - Will it be realised?
    - **Almost certainly**
    - **Likely**
    - **Unlikely**
      - Is it possible to redesign the Activity and influence the external factor?
        - **Yes**
          - Re-design the Activity, eg add activities or outputs or reformulate purpose statements
        - **No**
          - High risk activity which should probably not be funded by GoA
  - **No**
    - Do not include in the Logframe
    - Include as an assumption
## Our Logical Framework

<table>
<thead>
<tr>
<th>Intervention logic</th>
<th>Indicators</th>
<th>Sources of indicators</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General objective</strong></td>
<td>To reduce infant/babies and maternal mortality rates in the country</td>
<td>Infant/babies mortality rate reduced from x to y from year 201.. to year 201.. Motallity rate of pregnant/taking care of children women reduced from x to y from year 201.. to year 201..</td>
<td>Stats of Health Ministry (ex ante, in itinere, ex post)</td>
</tr>
<tr>
<td><strong>Project purpose</strong></td>
<td>To reduce the rates of infection among babies and infant in the region of ...</td>
<td>Rate of babies’ and infants’ infections reduced from x to y in hospitals and clinics concerned from year 201.. to year 201..</td>
<td>Data provided by hospitals and clinics concerned (ex ante, in itinere and ex post)</td>
</tr>
<tr>
<td><strong>Results</strong></td>
<td>Regular system of vaccination of infants and babies in 2 hospitals and 3 clinics located in the region of ...</td>
<td>Number of under 5 babies vaccinated in hospitals and clinics concerned ... increased from x% to y% from the year 201.. to year 201..</td>
<td>Clinical data on vaccination provided every 3 months by hospitals and clinics concerned</td>
</tr>
<tr>
<td></td>
<td>Improved nutritional status of infants and babies of monitored by 2 hospitals and 3 clinics located in the region of ..</td>
<td>Number of under 5 babies properly fed in the region of ... increased from x% to y% from the year 201.. to year 201..</td>
<td>Survey on the nutritional status of infants and babies in the region of ...</td>
</tr>
</tbody>
</table>
| **Activitie s** | 1. To renovate the hospital’s and clinic’s equipment
2. To provide hospitals and clinics with ambulances dedicated to vaccination
3. To encourage mothers to breastfeed
4. To guarantee logistic for regular supply of high protein foods and drugs... | Technical assistance
Supply of equipment
Supply of drugs
Awareness campaign | Maintainance of equipment is guaranteed by local experts/companies |
LF represents the project in one page

n.brignani@t33.it