

Objective Oriented Project Planning

Part II Formulation

1. Introduction

In Part II of this syllabus, the formulation of a project or programme using the logical framework will be described.

The logical framework is a set of related concepts that describes in an operational way the most important aspects of an intervention at a certain moment in time. The description is presented in the form of a matrix. With the help of a logical framework it can be verified and discussed whether the intervention has been well designed. It also facilitates monitoring and evaluation.

The logical framework is a way of presenting the contents of an intervention. The objectives, results, activities and their causal relationships are systematically presented in the first column of the matrix (vertical logic). Establishing a logical framework is only possible after thorough analysis of problems, objectives and strategies (Part I).

Logical framework matrix

Overall objective(s)	Objectively verifiable indicators	Sources of verification	
Project purpose	Objectively verifiable indicators	Sources of verification	Assumptions
Results	Objectively verifiable indicators	Sources of verification	Assumptions
Activities	Means	Costs	Assumptions
			Pre-conditions

Sustainability factors

In the formulation of projects and programmes sustainability aspects need to be kept in mind right from the start.

Factors that ensure sustainability, formulated by the European Commission, are:

- Ownership by beneficiaries – does the target group support the project?
- Policy support – is there an appropriate sector policy by the government?
- Appropriate technology – is the chosen technology affordable and is it possible to use it under the local conditions?
- Environmental protection – are there any harmful environmental effects to be expected as a result of the implementation of the project?
- Socio-cultural issues – will the project promote equitable distribution of access and benefits?
- Gender equality – have sufficient measures been taken to ensure that the project will meet the needs and interest of both women and men?
- Institutional and management capacity – is there sufficient capacity and resources with the implementing agency to continue service delivery in the longer term?
- Economic and financial viability – do the benefits of the project justify the costs involved?

4.2 Description of the logical framework

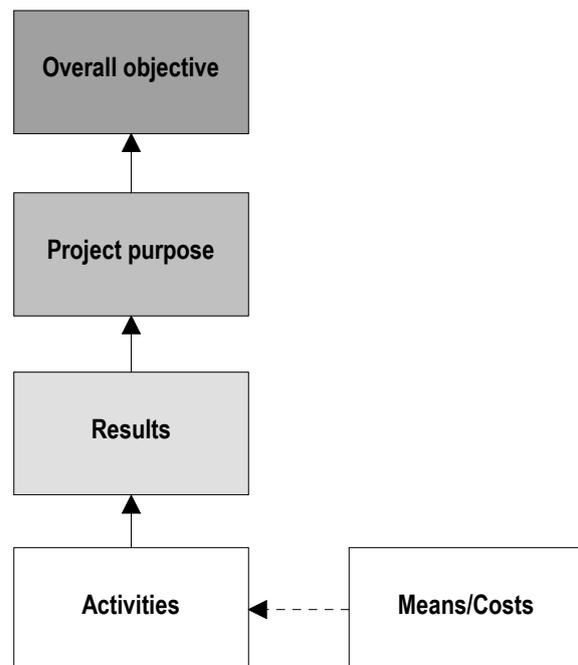
4.2.1 The intervention logic

The first column renders the intervention logic, which is the basic strategy underlying the intervention. It contains the positive states to be realised by the intervention as well as the overall objective to which the intervention is to contribute.

The intervention logic runs from the means to the overall objective: through the availability of the means, activities can be carried out; by the execution of the activities, results are achieved; the results will lead to the project purpose; and through the project purpose, the intervention contributes to the overall objective.

Overall objective: a high level objective to which the intervention will contribute (e.g. overall sub-sector objectives). Other interventions and activities will also contribute to the realisation of this objective. It is the wider positive effect to which the achievement of the project purpose will contribute.

Project purpose: the objective to be reached by the intervention. There should be a fair chance that this objective will be realised by the project intervention.



Sustainable benefits for the beneficiaries (taking into account gender, age, race, and ethnicity) are always the underlying purpose of the project. These should be tangible benefits expressing how the beneficiaries use the project results.

Results: products or services resulting from the activities. The results together will lead to the realisation of the project purpose. The results are the outputs that the project is to deliver to the beneficiaries (taking into account gender, age, race, and ethnicity) in order to allow them to realise tangible benefits.

Activities: the activities that have to be executed in the intervention in order to reach the results. The set of activities that is needed to produce the specific result.

The physical and non-physical **means** and **costs** (inputs) necessary to carry out the activities.

Different organisations use different terminology for the same concepts. An overview:

Differences in terminology

MDF terminology	Other terms used
Overall objective	Goal Development objective Long-term objective
Project purpose	Short-term objective Specific objective
Results	Outputs Immediate objectives
Activities	Actions
Assumptions	Risks Development hypothesis
Sources of verification	Means of verification Means of assessment Source of information

4.2.2 Objectively verifiable indicators (OVIs)²

The second column of the logical framework renders the objectively verifiable indicators. The indicators present an operational description of the overall objective, project purpose and results, in terms of the variable (what will change?), target groups, place and time. The indicators are in fact a precise definition of the intervention logic. Since the activities are defined as concrete actions, no indicators are formulated.

Indicators make the intervention logic operational and measurable and enables:

- verification of the viability and sustainability of the project purpose and the results;
- result oriented planning of resources (physical, human and financial);
- monitoring of the project purpose, results and activities.

² See also the MDF syllabus 'Indicators'

When formulating indicators it is important to make sure that they are gender and equality sensitive.

4.2.3 Sources of verification

The third column describes the sources of verification. The sources of verification state how or where the information can be found to verify the realisation of the objective, purpose and results (made operational through the indicators). They are documents, reports and other sources that provide information and permit judgements regarding the actual progress towards overall objective, project purpose and results.

Sources of verification can be internal or external to the project; they are produced by the project itself or by independent organisations outside the project context. Care has to be taken in choosing a reliable source.

4.2.4 Means and costs

Means are physical and non-physical resources (inputs) that are necessary to execute the planned activities and to manage the project. A distinction can be made between human, physical and financial resources.

Costs are the financial translation of all identified means. The presentation of costs is preferably made according to a standardised budget format. The contribution of the donor, the government of the beneficiary country and possible other donors are specified in one or more currencies (in accordance with the requirements).

4.2.5 Assumptions and preconditions

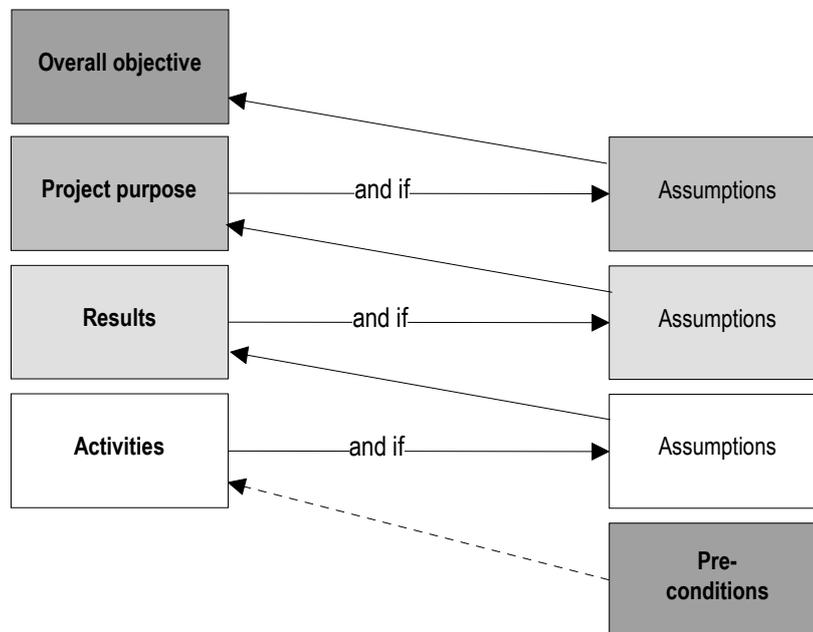
The fourth column renders the assumptions. Assumptions are external factors for which the intervention is not responsible, but that are very important for the realisation of the results, the project purpose and the overall objective. They are outside direct intervention control, but vital for achieving a successful implementation.

For example in the demonstration case, 'enough labour to harvest the rice production' is an external factor, which decisively determines whether results will sustainably contribute to the project purpose. The assumption is that enough labour capacity is available to harvest the rice production. If - without additional measures - it is unlikely that men and women make sufficient effort to harvest the higher yields, the assumption is considered a 'killer' assumption.

Killer assumptions make a successful implementation of an intervention impossible. In the case of a killer assumption the concerned part of the project design must be reviewed. For instance, the government may be required to launch an 'awareness programme for division of labour'.

The actual launching of such a programme may be put as a precondition. Preconditions are external factors that have to be met before the start of the project. They are placed in the lowest cell of the 4th column.

In the logical framework, relationships between the external factors and the intervention logic are presented as follows:



This scheme reads as follows:

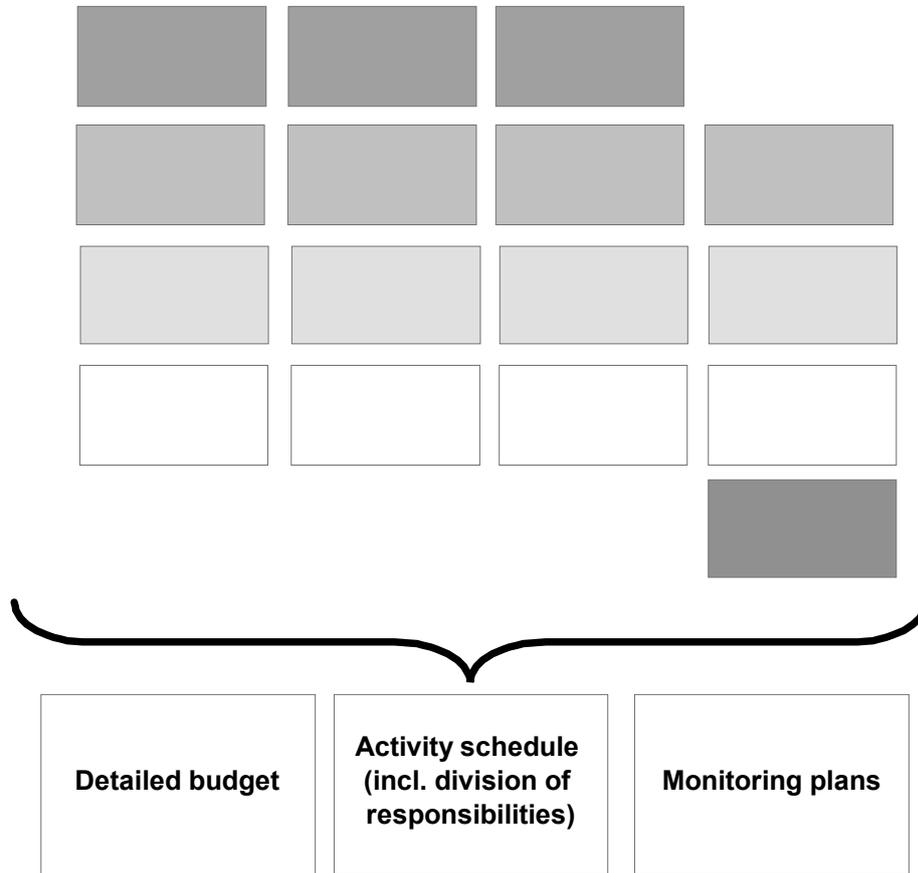
- if the preconditions are complied with, then the activities can be started;
- if the activities are realised, and if the assumptions at the activity level have come true, then the results will be realised;
- if the results are realised, and if the assumptions at the result level have come true, then the project purpose will be realised;
- if the project purpose is realised, and if the assumptions at the project purpose level have come true, then the overall objective will have significantly been contributed to.

4.2.6 Application of the logical framework

The logical framework assists people who are preparing a project, programme or even a complete sector policy to formulate and structure their considerations in a better way, and to clearly describe the intervention in a standardised way. It forces people to think things over, logical, communicate and allows people to ask questions. The logical framework has no other aspirations. For example, if the intervention is based on poor policies or wrong criteria, the logical framework will reveal contradictions and missing links, but it cannot change or replace them.

The logical framework is a tool that can contribute to improved planning of a project or programme. The success of an intervention depends on many other factors, for example the competence, the know-how, attitude (participatory) and the organisational capacity available within the project team or within the organisations involved in the execution of the project or programme. Therefore, the discipline imposed by the logical framework can never replace the professional qualities of those who use these tools.

A complete project plan includes a logical framework, a budget, an activity plan and plans for monitoring:



In this syllabus, the focus is on the use of OOPP and the logical framework in the phases of identification and formulation. However, logical frameworks are also very useful in the subsequent phases of the project cycle. They can be used to appraise project proposal, they serve as an instrument to monitor projects and they can serve as the basis for project evaluation. Over the years that a project is implemented, it will be further detailed and regularly updated. If these adaptations and changes are incorporated in the project's logical framework, this will provide insight in the project's track record.

2. Procedures to develop the logical framework

5.1 Determine the intervention logic

1. Identification of the project purpose

The project purpose is always an expression of sustainable benefits for the project's or programme's target groups.

Select the objective from the objective tree that is situated on top of a cluster or in case of a combination of several clusters, find or formulate an objective that covers them all (see analysis of strategies).

In case more project purposes would be selected, a logical framework must be made for each different project purpose.

2. Identification of the overall objective

Select from the objectives tree an objective, which is situated higher than the project purpose, describing in broad terms the perspective in which the intervention will be executed. Usually, this will be an objective at the sub-sector policy level.

3. Identification of results

Select from the objective tree the objectives that - following the means-end logic - lead to the project purpose.

It is possible to add other results that are also needed to realise the project purpose. These additional results are identified through a complementary analysis of opportunities and risks of the situation.

4. Identification of activities

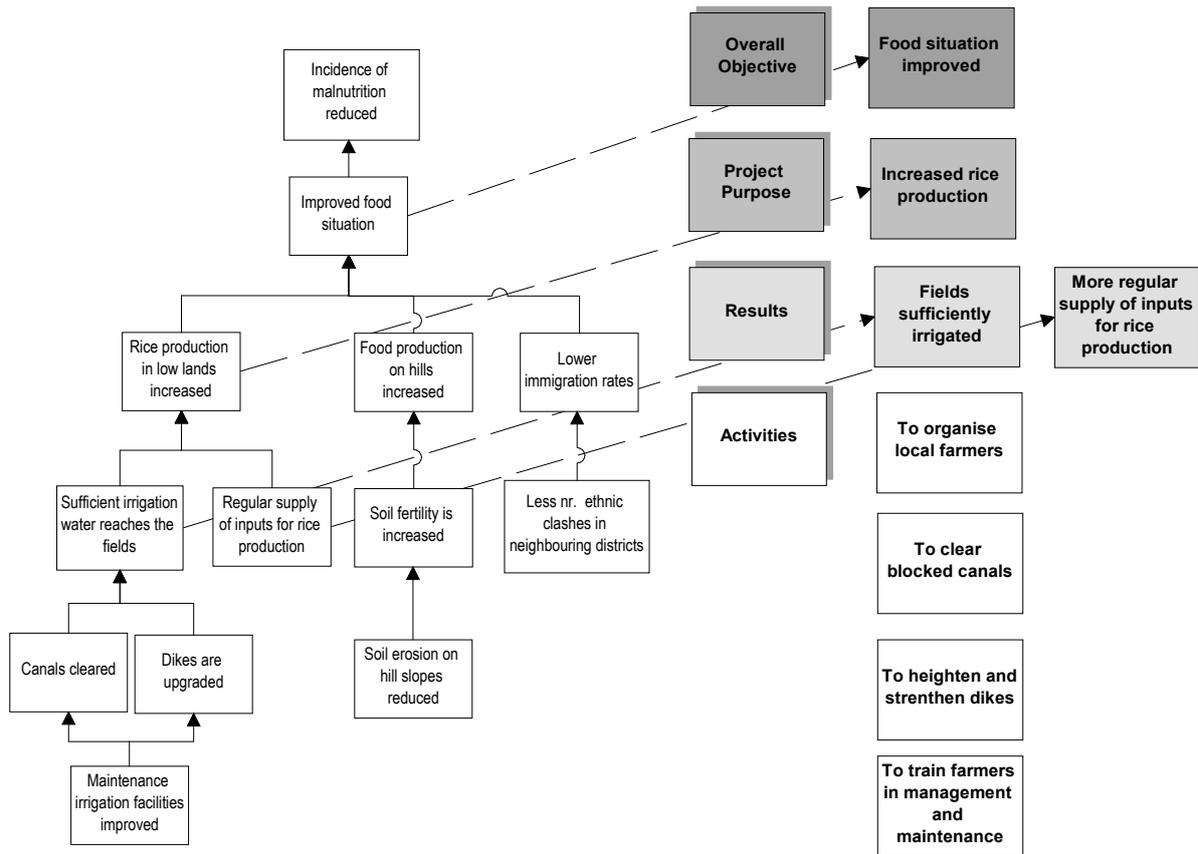
Select from the objective tree the objectives that - following the means-end logic - lead to the results and translate them into activities.

It is possible to add other activities that are needed to realise the results. These additional activities are identified by means of a complementary analysis of opportunities and risks.

The different stakeholders will have to negotiate to come to the intervention logic. All parties should agree on the chosen objectives and activities (see scoping in par. 3.3). Differences in race, age, ethnicity and gender will play a role. The facilitator has to make sure that needs and interests of all stakeholders are considered.

Demonstration case: relation between objective tree and logical framework

The stakeholders decided that they will develop a project for the irrigation system



Clarification of important aspects of the intervention logic

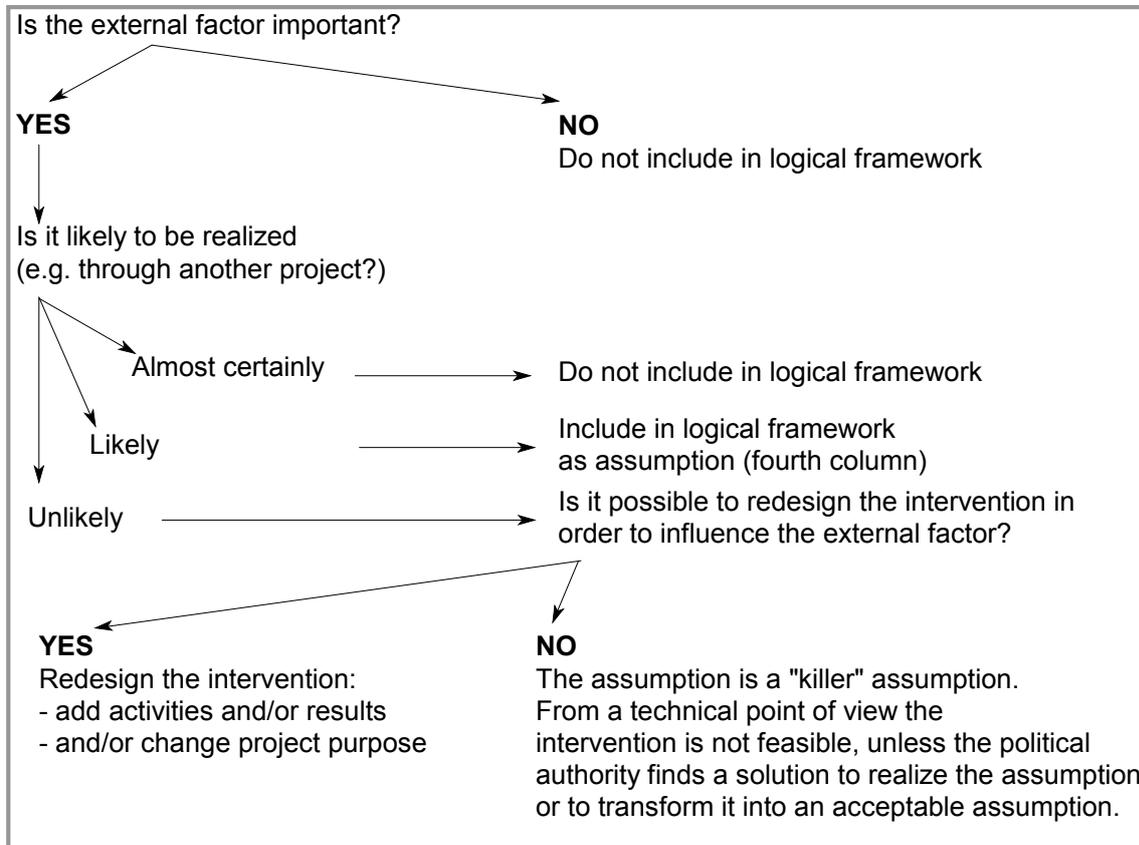
<i>What is the importance of the overall objective?</i>	The overall objective describes the perspective of this intervention and other ones contributing to it. At this level, the influence of those in charge of the project is limited.
<i>What is the importance of the project purpose?</i>	The project purpose is the focal reference - in terms of sustainable benefits for target groups - which facilitates the management of the intervention and the monitoring/ evaluation of its success or failure.
<i>When is the project ended?</i>	When the project purpose is achieved, i.e. - the 'product' is realised and 'sold' to the benefit of the target group, - and it is estimated that the product will continue to exist.
<i>Why is only one project purpose established?</i>	Only one project purpose is established in order to prevent the intervention from becoming too complex and extremely difficult to manage. Instead of one intervention featuring two different purposes, it is preferable to plan separate (parallel and inter-related) interventions.
<i>How are the results determined?</i>	The results are either deduced from the diagram of objectives or from specific studies.
<i>How are the activities determined?</i>	Activities are determined by - deducing them from the diagram of objectives; - specific studies; - consultation with the parties involved.
<i>Why need activities to be determined?</i>	Activities need to be determined to a sufficient level of detail in order to be able to: - draw up a tentative working schedule and to calculate the likely duration of the intervention; - deduce the necessary human and physical resources, incl. who's going to be responsible for which activities; - establish the budget.

5.2 Define assumptions and pre-conditions

After having described the intervention logic, the assumptions are developed. Assumptions answer the question: "Which external factors, that are not under the direct control of the project management, could significantly affect the realisation of the intervention?"

1. Identify in the objective tree those objectives that are not included in the intervention logic (first column), but that are important for the realisation of the stated objectives in the intervention logic.
2. Assess all external factors upon their importance and chance to be realised, using the algorithm depicted below.

Algorithm to assess external factors



3. Place these objectives as external factors at the appropriate level (project purpose, results, activities), keeping in mind the reasoning as presented in the figure at page 15.
4. Identify other external factors, not included in the objective tree, but important for the success of the intervention.

Demonstration case: Assumptions

Derived from the objective tree:

- Agricultural production on hills improved or at least stabilised
- Fewer people immigrate from neighbouring districts

Additional external factors are:

- Enough labour to harvest the rice production
- Access roads in good condition.
- Traders continue to supply inputs.
- Social relations permit farmers to organise themselves.

5. This assessment leads to one of the following three conclusions:
 - the external factor can be left out as it is almost 100 percent certain to be realised;
 - the external factor will be kept as an assumption or a precondition;
 - the intervention should be redesigned.
6. Check whether the intervention is logical and complete.

Clarification of important aspects of the assumptions

<i>What is the importance of assumptions?</i>	Assumptions influence or even determine the realisation of results, project purpose and overall objective. Already in the planning phase, these external factors should be known and it should be assessed whether they are likely to become true.
<i>Why introduce assumptions?</i>	The intervention logic never covers the whole reality concerned. External factors often have an important influence on the success of the intervention, and should therefore be identified and taken into account.
<i>How to identify the assumptions?</i>	Some of the 'objectives' included in the diagram of objectives may be assumptions. Other assumptions may be identified by experts or other parties involved.
<i>When do external factors become assumptions?</i>	External factors should be checked on their importance regarding the success of the intervention. If of (vital) importance, and if impossible to include in the intervention, then factors should be kept as assumptions.
<i>What to do if assumptions that are important for project success are unlikely to be realised (killer assumptions)?</i>	Cancel or reformulate the project, by adding certain results or by modifying the project purpose.
<i>How to formulate assumptions?</i>	Assumptions should be formulated as positive, reached states, so that they can be verified.
<i>At which level in the logical framework should assumptions be included?</i>	Assumptions link the different levels of the intervention logic. They should therefore be included at the appropriate level. The level at which an assumption is placed, depends upon whether the assumption contributes to the realisation of either the overall objective, the project purpose, or (one of) the results.
<i>What is a pre-condition?</i>	A pre-condition is an external factor that must be realised before activities of the intervention will be started.

5.3 Define objectively verifiable indicators

1. Specify for the project purpose, each result and for the overall objectives:

- What? : the variable, the element that will change once the project is implemented
: quantity, how much (baseline value and target value)
- Who? : the target group(s)
: quantity, how many
- Where : the place
- When : the time/ period, time span needed

To illustrate this step, an example of the Project Purpose "Increased Rice Production", of the demonstration case is given:

Demonstration case: Formulation of an indicator

Variable	What?	Average husked rice production in kg. increased
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	How much?	From 2.000 to 4.000 kg. per ha.
Target group	Who?	Small farmers (owning < 2 ha. land), in 7 villages
	How many?	240
Place	Where?	In low lands of Bogo, district Dubia
Time	When?	2003-2007

An indicator can only be formulated if the description of both the present situation and the future desired situation is specific and clear. In addition, the desired situation should be realistic. Often a baseline study is carried out to obtain the necessary information on the present situation.

2. Verify whether each objectively verifiable indicator describes the objective, purpose, or result accurately. If this is not the case, another indicator or additional indicators should be defined; it is possible to have more than one indicator per objective.
3. When assessing whether the objectively verifiable indicators for the project purpose actually include the notion of 'sustainable benefits for the target groups', it should be checked whether the following elements are included:
 - the clear description of the 'product' or the 'services' for the beneficiaries;
 - the specific beneficiaries (gender, age, ethnicity, class) that are meant to benefit from it;
 - the responsibility to maintain these services and products;
 - the period of time in which the benefits will be available for the target groups.
4. The formulation of the indicator for a result, in which the result is in fact made more concrete, often leads to the realisation that the activities do not exactly link up to the result. If this is the case, it may be necessary to add, modify or delete activities.

Two types of indicators are distinguished:

- the direct indicator for phenomena that are tangible and can be measured directly, e.g. an increase in rice production, the number of schools taken into use or the number of books printed;
- the indirect, or proxy indicator; for phenomena that are less tangible and therefore difficult to measure directly, e.g. increased awareness, hygiene practices, reduced corruption practices. An indirect indicator does not measure the phenomenon, for example awareness, directly, but through another phenomenon, for example, the scores of tests on awareness.

In the latter case it is often necessary to define more than one indicator that together more or less describe the intended change that is meant with the intervention.

E.g. the result in an HIV/AIDS prevention project is: social stigma on HIV/AIDS patients diminished – this can be measured by the following variables:

- number of HIV/AIDS patients participating in Home Based Care programme;
- number of HIV/AIDS patients indicating that the quality of their social life is improved;
- test about causes and effects of HIV infection

Clarification of important aspects of objectively verifiable indicators

Why define OVIs?

OVIs are defined to:

- clarify the characteristics of the overall objective, the project purpose, the results and the activities;
- enable objective planning and management of the intervention;
- enable objective monitoring and evaluation.

What criteria should OVIs meet?

OVIs should be:

- specific as to quantity and quality;
- substantive (cover the essential) and reliable;
- independent from each other; each OVI should relate to a single objective, purpose or result;
- verifiable, based on available and accessible information;
- sensitive to social (in)equality (role of women, youth, different ethnicities)

Is there just one OVI per activity, result, purpose or objective?

Often it is necessary to define several indicators, which together will provide reliable information concerning the realisation of an objective, purpose, or result.

Is it always possible to find an OVI?

A good OVI measures in a direct way; e.g. 'increased production' is measured by comparing the different crop results.

If direct measurement is impossible, it is necessary to find 'proxy indicators'; e.g. for 'income of farmers increased', one may take improvements in housing conditions (tiles, roofing).

Can all objectives, purposes and results be made operational by means of OVIs?

Sometimes it is difficult to make them operational, but it should always be attempted, as they greatly facilitate objective management, control and evaluation.

5.4 Define sources of verification

1. Determine which sources of verification are necessary to obtain information on the objectively verifiable indicators.
2. For the sources of verification that are situated outside the intervention, it should be verified whether:
 - a. their current form and presentation is manageable;
 - b. they are specific enough;
 - c. they are reliable;
 - d. they are available, can easily be obtained;
 - e. the costs to obtain the information are reasonable.
3. Define the sources of verification that should be collected, processed and stocked by the intervention itself.
4. The objectively verifiable indicators for which no sources of information can be found, cannot be used and should be replaced by others. Sources of verification for these new indicators should then be established.

Clarification of important aspects Sources of Verification

<i>Why should the sources of verification be described?</i>	In order to be able to obtain correct information concerning the purpose and results, which were made operational through the OVIs.
<i>Where can sources of verification be found?</i>	<ul style="list-style-type: none"> - External to the intervention: it needs to be established how to get access to the data which are 'owned' by external parties. - Within the intervention: activities need to be planned to establish the sources.
<i>What criteria should be met by the sources of verification?</i>	The sources of information should provide data that are both reliable and accessible.
<i>At what phase should the sources of verification be established?</i>	During the preparation phase, when project purpose and results are established. During the implementation phase they can be further specified.

5.5 Describe means, costs and activity plan

1. Determine the human, physical and financial means necessary to execute the planned activities (first column, 'intervention logic').
2. Determine the human, physical and financial means necessary for management and support activities that have not been formulated in the logical framework (e.g. construction of a co-ordination office, administrative personnel).
3. Classify the means and their costs by origin: e.g. European Commission, National Government, Beneficiaries and other donors.
4. Calculate the costs for the means as determined, allocate them to the appropriate financing partners, and prepare the total budget.

Finally, to illustrate all these steps, this is what the logical framework of the demonstration case looks like:

Literature used:

- Building bridges in PME, guidelines for good practice in the planning, monitoring and evaluation of community based development projects implemented by southern NGOs with support from European ecumenical agencies, ICCO (2000)
- Manual Objective Oriented Project Planning, Little & van de Geer (1994)
- 'The myth of community: gender issues in participatory development', editors I. Guijt and M. Kaul Shah
- article: 'Brides have a price; gender dimensions in OOPP in Zimbabwe', R. Debrabandere and A. Desmet (1998).

OO	<p>Reduced incidence of malnutrition</p> <p>Food situation improved</p>	<p>OVI</p> <p>Average 500 kg. white rice consumed per year per household (800 in total); same (indexed) price; in lowlands of Bogo; from 2002-2007</p>	<p>SoV</p> <p>Survey by Ministry of Agriculture in 2006</p>	<p><u>Assumptions</u></p>
PP	<p>Increased rice production</p>	<p>OVI</p> <p>Average husked rice production in kg. Increased from 2.000 to 4.000 kg. Per ha.; 240 small farmers (owning <2 ha.) in 7 villages; from 2003-2007; in lowlands of Bogo district Dubia</p>	<p>SoV</p> <p>Extension workers' reports</p>	<p>Agricultural production on hills improved or at least stabilised</p> <p>Fewer people immigrate from neighbouring districts</p>
R	<p>1. Fields sufficiently irrigated</p>	<p>2. More regular supply of inputs for rice production</p>	<p>3. Increased and applied knowledge on new agricultural practices</p>	<p>Enough labour to harvest the rice production</p>
OVI	<p>The quantity of irrigation water reaching the fields is in growing season 15.000 litres per ha. of 240 small farmers (owning <2 ha.) in 7 villages; from 2002-2003; the lowlands of Bogo</p>	<p>Seed and fertiliser available 1 month before planting season; 480 bags of 140 kg. urea and 480 bags of 50 kg. seed; 240 small farmers (owning <2 ha.) in 7 villages; from 2002-2005; in lowlands of Bogo</p>	<p>Average score of male and female farmers on test about the agricultural practices is 5 in 2002 and will be 9 in 2003</p>	
SoV	<p>Water samples at the irrigation source taken at random at different time intervals during growing season.</p>	<p>Annual survey at distribution points</p>	<p>Results tests done by extension workers and NGOs</p>	
A	<p>1.1 To organise local farmers associations</p> <p>1.2 To clear blocked canals and stop the leaking</p> <p>1.3 To heighten + strengthen dikes</p> <p>1.4 To train farmers in management and maintenance</p>	<p>2.1 To organise purchase of inputs</p> <p>2.2 To organise inputs distribution</p>	<p>3.1 To organise extension service</p> <p>3.2 To train extensionists</p> <p>3.3 To train farmers (male and female) in new agricultural practices</p>	<p>Access roads in good condition.</p> <p>Traders continue to supply inputs.</p> <p>Social relations permit farmers to organise themselves.</p>
<p>Preconditions:</p> <p>Government is willing to support the project by making the extension workers of the Agricultural Department available</p>				