GUIDE TO
THE LOGICAL FRAMEWORK APPROACH

Република Србија
Влада
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GUIDE TO
THE LOGICAL FRAMEWORK APPROACH:

A KEY TOOL FOR PROJECT CYCLE MANAGEMENT

Second edition

GUIDE TO THE LOGICAL FRAMEWORK APPROACH

CONTENTS

LIST OF ABBREVIATIONS

CIDA	Canadian International Development Agency
CSO	Civil Society Organisations
DFID	Department for International Development
EC	European Commission
EU	European Union
EUD	European Union Delegation
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
ISNAR	International Service for National Agricultural Research
IPA	Instrument for Pre-Accession
LFA	Logical Framework Approach
LFM	Logical Framework Matrix (Logframe Matrix)
NAD	Needs Assessment Document
NGO	Non-Governmental Organisation
OECD	Organisation for Economic Co-operation and Development
OVI	Objectively Verifiable Indicators
PCM	Project Cycle Management
PF	Project Fiche
PPF	Project Preparation Facility
PRSP	Poverty Reduction Strategy Paper
ROM	Result Oriented Monitoring
SEIO	European Integration Office
SIDA	Swedish International Development Cooperation Agency
SOV	Sources of Verification
SWOT	Strengths, Weaknesses, Opportunities and Treats
ToR	Terms of Reference
USAID	United States Agency for International Development
QSG	Quality Support Group
ZOPP (GOPP)	Ziel-Orientierte Projekt Planung (Goal Oriented Project Planning)

INTRODUCTION

The **Logical Framework Approach** is an analytical and management tool which is now used (in one form or another) by most multi-lateral and bi-lateral aid agencies, international NGOs and by many partner governments for the management of development projects.

Developed in the late 1960s to assist the US Agency of International Development to improve its project planning and evaluation system, the Logical Framework Approach (LFA) was designed to address three basic concerns, namely that:

- Planning was too vague, without clearly defined objectives that could be used to monitor and evaluate the success (or failure) of a project;
- Management responsibilities were unclear; and
- Evaluation was often an adversarial process, because there was no common agreement as to what the project was really trying to achieve.

The LFA has since been adopted as a project planning and management tool by most donors, multilateral and bilateral development agencies. Even though different agencies/donors modify the formats, terminology and tools used in their LFA, the basic analytical principles have remained the same.

Indeed, the EU, the main external donor to Serbia, requires the development of a Logframe Matrix as part of its IPA project formulation procedures (LFM is an integral part of IPA Project Fiche). Other donors also use the LFA as a core tool to the project cycle management.

The LFA is a very effective analytical and management tool when understood and intelligently applied. However, it is not a substitute for experience and professional judgment and must also be complemented by the application of other specific tools (such as Economic and Financial Analysis and Environmental Impact Assessment) and through the application of working techniques which promote the effective participation of stakeholders.

Purpose of the guide

Second edition of the Guide to the Logical Framework Approach (LFA) has been developed by the European Integration Office (SEIO), in close cooperation with IPA funded Project Preparation Facility 2008 and SIDA/DfID funded project "Support to SEIO for Effective Partnerships for Improved Aid Effectiveness". One of the main reasons for making the second edition, as well as what is somewhat different from the first edition (2007) was an attempt to present a complex area in a practical manner and to provide clear guidance to users on how to start drafting a logical framework matrix (LFM) that will furthermore lead towards formulation of high quality projects.

The purpose of the guide is to enable its users to advance the skills in using LFA as a planning tool and in developing LFM with all its elements. The guide also provides the explanation of the application of the LFA in the context of Project Cycle Management phases and procedures.

Who are these guidelines for

The knowledge of the principles of LFA and skills in drafting LFM are essential for all civil servants involved in the programming and design as well as the implementation and management of development projects, but also for all others working in non-governmental organisations, local self-governments, consultant companies, etc. that are involved in project preparation, implementation and management.

These guidelines also aim at providing instruction to develop a Logical Framework Matrix at the various stages of the project management cycle, in order to improve both the consistency and quality of project documents throughout the different stages of the project cycle.

Structure of the guide

While the first part of the guide presents what is the logical framework approach (LFA) and the two stages of the LFA, second part provides explanation on how to design the logical framework matrix (LFM), in part three the guide presents linkages between logframe approach and the project cycle management.

The concepts described are illustrated by different examples. The main example used all along this guideline is a project related to water treatment taken from the PCM Guidelines published by the European Commission (2004). It has been adapted to meet the specific need of this manual.

Fourth part of this guide is related to annexes, providing practical example of logframe and supported by standardised logframe template, as well as terminology used in guide, presented in terms of glossary and list of sources of information.

1 PART

LOGICAL FRAMEWORK APPROACH

It is useful to **distinguish** the **Logical Framework Approach (LFA)**, which is an **analytical process,** from the **Logical Framework Matrix (LFM)**, also called Logframe matrix (notably in this guideline), which provides the **documented product of the analytical process**, a synthetic representation of the project design

Overview of the Logical Framework Approach

What is it?

The Logical Framework Approach (LFA) is an analytical process and set of tools used to support objectives-oriented project planning and management. It provides a set of interlocking concepts which are used as part of an iterative process to aid structured and systematic analysis of a project or programme idea.

The LFA is a way of describing a project in a logical way so that it is:

- **Well designed**
- **Described objectively**
- **Can be evaluated**
- **Clearly structured**

The LFA should be thought of as an **'aid to thinking'.** It allows information to be analysed and organised in a structured way, so that important questions can be asked, weaknesses identified and decision makers can make informed decisions based on their improved understanding of the project rationale, its intended objectives and the means by which objectives will be achieved.

The LFA helps to:

- Analyse an existing situation, including the identification of stakeholders' needs and the definition of related objectives;
- Establish a causal link between inputs, activities, results, purpose and overall objective (vertical logic);
- Define the assumptions on which the project logic builds;
- Identify the potential risks for achieving objectives and purpose;
- Establish a system for monitoring and evaluating project performance;
- Establish a communication and learning process among the stakeholders, i.e. clients / beneficiaries, planners, decision-makers and implementers.

History

Originally developed and applied in science (NASA) and the private sector (management by objectives) for the planning and management of complex projects, the Logical Framework Approach was first formally adopted as a planning tool for overseas development activities by USAID in the early 1970s. Since then it has been adopted and adapted by a large number of agencies involved in providing development assistance. They include the British DFID, Canada's CIDA, the OECD Expert Group on Aid Evaluation, the International Service for National Agricultural Research (ISNAR), Australia's AusAID and the German GIZ. With its 'ZOPP'-version (Ziel-Orientierte Projekt Planung) GIZ has put particular emphasis on the participation of stakeholders in the application of the approach. EC requires application of the LFA and preparation of the Logframe as a part of EU funding applications.

The Pros and Cons of Logical Framework Approach

As for any instrument of project cycle management (for more details on project cycle management please refer part 3 of this guide), there can be advantages and limitations of using LFA. They can be summarised as follow[1]:

Advantages

- It ensures that fundamental questions are asked and weaknesses are analysed, in order to provide decision makers with better and more relevant information.
- It guides systematic and logical analysis of the inter-related key elements which constitute a well-designed project.
- It improves planning by highlighting linkages between project elements and external factors.
- It provides a better basis for systematic monitoring and analysis of the effects of projects.
- It facilitates common understanding and better communication between decision makers, managers and other parties involved in the project.
- Management and administration benefit from standardised procedures for collecting and assessing information.
- The use of LFA and systematic monitoring ensures continuity of approach when original project staff is replaced.
- As more institutions adopt the LFA concept it may facilitate communication between governments and donor agencies. Widespread use of the LFA format makes it easier to undertake both sectoral studies and comparative studies in general.

[1] *Extracted from "The Logical Framework Approach" –4th Edition - NORAD -1999*

Limitations

- Rigidity in project administration may arise when objectives and external factors specified at the outset are over-emphasised. This can be avoided by regular project reviews where the key elements can be re-evaluated and adjusted.
- LFA is a general analytic tool. It is policy-neutral on such questions as income distribution, employment opportunities, access to resources, local participation, cost and feasibility of strategies and technology, or effects on the environment. LFA is therefore only one of several tools to be used during project preparation, implementation and evaluation, and it does not replace target-group analysis, cost benefit analysis, time planning, impact analysis, etc.
- The full benefits of utilising LFA can be achieved only through systematic training of all parties involved and methodological follow-up.

Using the Logical Framework Approach for Project Design

The two Main Stages of Logical Framework Approach

As with most other donors, one needs to use the logical framework approach for identification and formulation of projects receiving financial assistance from the European Union. It is an **analytical process** and a **set of tools** (instruments) to be used in project management.

Log frame matrix, a documented product of the LFA is prepared before a project proposal and makes its integral part. What is achieved in this way is the development of a balanced project which has measurable objectives and takes into account assumptions and risks.

The LFA is composed of two stages used in project identification and formulation:

1. **Analysis stage and**
2. **Planning stage**

These two phases are carried out progressively during the identification and formulation of the project[2] so to ensure the quality of design and therefore its implementation as well as its ex-post evaluation.

The two main stages of the LFA can be summarised in the table below:

ANALYSIS PHASE	PLANNING PHASE
Stakeholder analysis - identifying & characterising potential major stakeholders; assessing their capacity **Problem analysis -** or "Problem Tree". It consists of identifying key problems, constraints & opportunities; determining cause & effect relationships **Objective analysis –** or "Solutions Tree". It consists in developing solutions from the identified problems; identifying means to end relationships. **Strategy analysis –** identifying different strategies to achieve solutions; selecting most appropriate strategy.	**Developing Logical Framework matrix -** defining project structure, testing its internal logic & risks, formulating measurable indicators of success **Activity scheduling –** determining the sequence and dependency of activities; estimating their duration, and assigning responsibility **Resource scheduling –** or "Budgeting". from the activity schedule, developing input schedules and a budget

The **Analysis Stage** should be carried out as an iterative learning process, rather than as a simple set of linear 'steps'. For example, while stakeholder analysis must be carried out early in the process, it must be reviewed and refined as new questions are asked and new information comes to light.

In the **Planning Stage** the results of the analysis are transcribed into a practical, operational plan ready to be implemented. It is the stage where the project is technically designed. This stage is again an iterative process, as it may be necessary to review and revise the scope of project activities and expected results once the resource implications and budget become clearer.

The Analysis Stage

Preparatory Analysis

Prior to initiating detailed analytical work with stakeholder groups (field work), it is important that those involved in the identification or formulation/preparation of projects are sufficiently aware of the policy, sector and institutional context within which they are undertaking their work.

Key documents to refer to would include donor's country strategy papers and relevant Government development policy documents, such as the National Development plan (when applicable), the Poverty Reduction Strategy and relevant Sector Policy documents.

The scope and depth of this preliminary analysis will be primarily dependent on how much information is already available and its quality.

In general, it should not be the work of each individual project planning team to undertake 'new' analysis of development/sector policies or the broader institutional framework. Rather they should access existing information and then work to ensure that the development of the project idea takes account of these elements of the operating environment.

Stakeholder Analysis

Purpose and key steps

'**Stakeholders**' can be defined as any individuals, groups of people, institutions or firms that may have a significant interest in the success or failure of a project (either as implementers, facilitators, beneficiaries or adversaries).

A basic premise behind stakeholder analysis is that different groups have different concerns, capacities and interests, and that these need to be explicitly understood and recognised in the process of problem identification, objective setting and strategy selection.

There are a variety of key words used to differentiate between different types of stakeholder. A summary of the suggested **terminology** is provided below:

1. Stakeholders: Individuals or institutions that may – directly or indirectly, positively or negatively – affect or be affected by a project or programme.
2. Beneficiaries: Are those who benefit in whatever way from the implementation of the project. Distinction may be made between:
(a) Target group(s): The group/entity who will be directly positively affected by the project at the Project Purpose level. This may include the staff from partner organisations;
(b) Final beneficiaries: Those who benefit from the project in the long term at the level of the society or sector at large, e.g. "children" due to increased spending on health and education, "consumers" due to improved agricultural production and marketing.
3. Project partners: Those who implement the projects in-country (who are also stakeholders, and may be a 'target group').

The **key questions** asked by stakeholder analysis are therefore:

- 'Whose problems or opportunities are we analysing' and,
- 'Who will benefit or loose-out, and how, from a proposed project intervention'?

How to conduct stakeholder analysis

Among the different existing tools to conduct stakeholder analysis (such as potential analysis, organisational landscapes, Venn diagrams, "field analysis", each with more specific purposes, the stakeholder analysis matrix and SWOT analysis are among the most widely used by donors.

In using any of these tools, the quality of information obtained will be significantly influenced by the process of information collection.

In this regard, the effective use of participatory planning methods and group facilitation tools can help ensure that the views and perspectives of different stakeholder groups are adequately represented and understood.

Stakeholder analysis matrix

As illustrated in the table below, the stakeholder analysis matrix describes:

- the basic characteristics of the stakeholders
- their interests and how they are affected in the problem/potential project
- their capacity and motivation to bring about change
- the possible action to address their interest

Stakeholder and basic characteristics	Problems (How affected by the problem(s)	IInterests (and possible actions to address it)	Potential (Capacity and motivation to bring about change)
Fishing families: X families, low income earners, small scale family businesses, organised into informal cooperatives, women actively involved in fish processing and marketing	Pollution is affecting volume and quality of catch Family health is suffering, particularly children and mothers	Maintain and improve their means of livelihood Support capacity to organise and lobby Implement industry pollution control measures	Limited political Influence given weak organisational structure Keen interest in pollution control measures
Industry X: Large scale industrial operation, poorly regulated and no unions, influential lobby group, poor environmental record	Some concern about public image Concern about costs if Environmental regulations enforced	Maintain/increase profits Raise their awareness of social and environmental impact Mobilise political pressure to influence industry behaviour Strengthen and enforce environmental laws	Have financial and technical resources to employ new cleaner technologies Limited current motivation to change
Households: X households discharge waste and waste water into river, also source some drinking water and eat fish from the river	Aware of industrial pollution and impact on water quality Health risks	Want access to clean water Want to dispose of own waste away from the household	Potential to lobby government bodies more effectively Appear willing to pay for improved waste management services Limited understanding of the health impact of their own waste/ waste water disposal
Local government Etc.			

The type of information collected, analysed and presented in the columns of such a matrix can be adapted to meet the needs of different circumstances. For example, additional columns could be added to specifically deal with the different interests of women and men, or ton underlines linkages between stakeholders.

Also, when analysing potential project objectives in more detail (at a later stage in project planning), greater focus should be given to analysing the potential benefits and costs of a proposed intervention to different stakeholder groups.

SWOT analysis

SWOT analysis (strengths, weaknesses, opportunities and threats) is used to analyse the internal strengths and weaknesses of an organisation and the external opportunities and threats that it faces. It can be used either as a tool for general analysis, or to look at how an organisation might address a specific problem or challenge.

The quality of information derived from using this tool depends (as ever) on who is involved and how the process is managed – it basically just provides a structure and focus for discussion. This information is most often represented in a matrix format as in the example below:

Strengths	Weaknesses
– Grassroots based and quite broad membership – Focused on the specific concerns of a relatively homogenous group – Men and women both represented – Provide a basic small scale credit facility	– Limited lobbying capacity and environmental management skills – Lack of formal constitutions and unclear legal status – Weak linkages with other organisations – Internal disagreements on limiting fishing effort in response to declining fish stocks
Opportunity	**Threats**
– Growing public/political concern over health impacts of uncontrolled waste disposal – New government legislation in preparation on Environmental Protection largely focused on making polluters pay – The river is potentially rich in resources for local consumption and sale – New markets for fish and fish products developing as a result of improved transport infrastructure to nearby population centres	– Political influence of industrial lobby groups who are opposed to tighter environmental protection laws (namely waste disposal) – New environmental protection legislation may impact on access to traditional fishing grounds and the fishing methods – that can be employed

Good practice

- Include the all relevant stakeholders in the analysis which should be done during the planning phase
- Make sure that different perspectives are considered
- Do not 'blind out' different cultural and social realities

Linking Stakeholder Analysis and the Subsequent Steps

Stakeholder analysis and problem analysis are closely connected as part of the initial "Situation Analysis". Indeed they should in practice be conducted 'in tandem' rather than 'one after the other'.

All subsequent steps required to prepare a Logical Framework Matrix (or Logframe) should also be related to the stakeholder analysis, making it a point of continuous reference.

Stakeholder analysis is an iterative process that evolves throughout the stages of the LFA, as well as informing decisions at all stages of both analysis and planning/design. Whenever the Logframe needs to be revised the stakeholder analysis should also be reconsidered, as the landscape of stakeholders involved in a project evolves over time. Thus, stakeholder analysis is not an isolated analytical step, but a process.

Problem Analysis

Purpose and key steps

The problem analysis identifies the **negative aspects of an existing situation and establishes the 'cause and effect' relationships between the identified problems.**

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

Rainstorming exercises with stakeholders are best suited for the problem analysis. It is essential to ensure that "root causes" are identified and not just the symptoms of the problem(s).

The problems identified are arranged in a 'problem-tree' by establishing the **cause and effect** relationships between the negative aspects of an existing situation.

Depending on the complexity of the situation to be addressed by the project, preliminary technical or socio-economic studies or assessments might be useful.

How to conduct problem analysis by creating problem tree

Creating a problem tree should ideally be undertaken as a participatory group event.

It is suggested to use individual pieces of paper or cards on which to write individual problem statements, which can then be sorted into cause and effect relationships on a visual display.
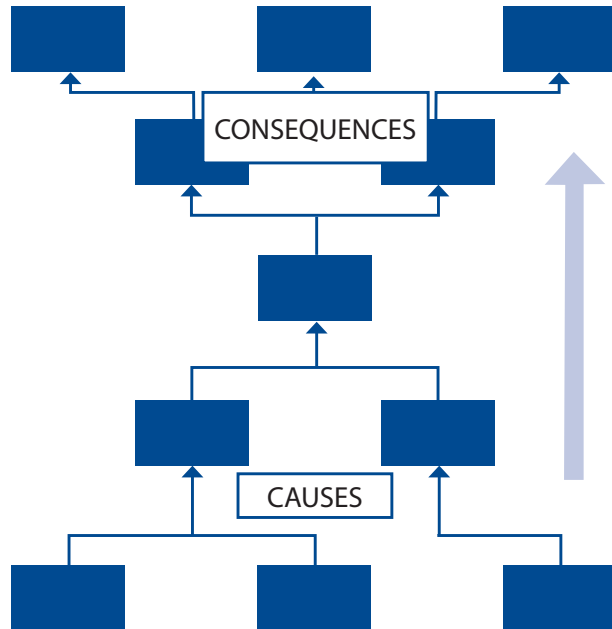
Step 1: Identify major existing problems, based upon available information. Openly brainstorm problems which stakeholders consider to be a priority.

This first step can either be completely open (no pre-conceived notions as to what stakeholder's priority concerns/problems might be), or more directed, through specifying a 'known' high order problem or objective (e.g. improved river water quality) based on preliminary analysis of existing information and initial stakeholder consultations.

Write down each problem on a separated visual support (paper/cards)

Step 2: Select an individual starter, a focal problem for analysis.

Step 3: Look for related problems to the starter problem: identify substantial and direct causes/effects of the focal problem

Step 4: Begin to construct the problem tree by establishing a hierarchy of cause and effects relationship between the problems:
- Problems which are directly causing the starter problem are put below
- Problems which are direct effects of the starter problem are put above

Step 5: All other problems are then sorted in the same way – the guiding question being 'What causes that?' If there are two or more causes combining to produce an effect, place them at the same level in the diagram.

Step 6: Connect the problems with cause-effect arrows – clearly showing key links

Step 7: Review the diagram, verify its validity and completeness and make necessary adjustment:

Ask yourself/the group – 'are there important problems that have not been mentioned yet?' If so, specify the problems and include them at an appropriate place in the diagram.

Step 8: Copy the diagram onto a sheet of paper to keep as a record, and distribute (as appropriate) for further comment/information

The example of problem tree is illustrated bellow:
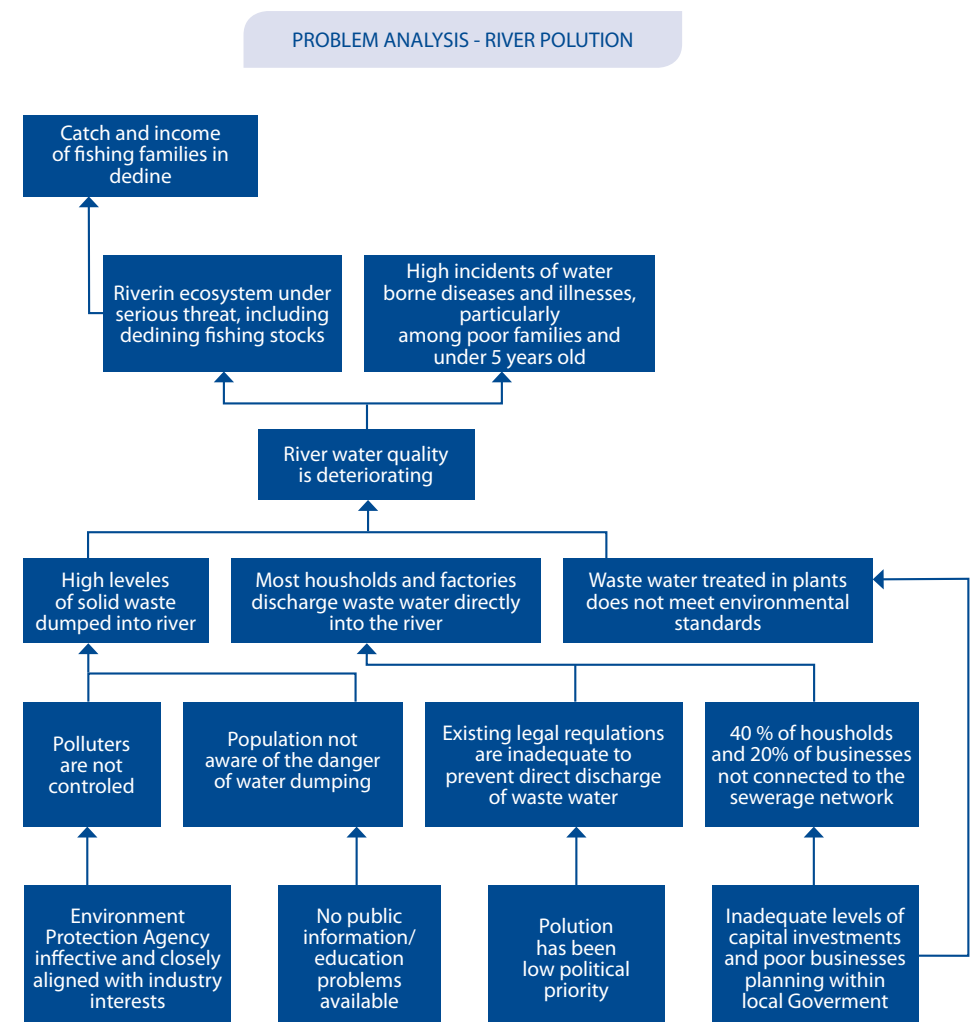
PROBLEM ANALYSIS - RIVER POLUTION

Analysis of Objectives

Purpose and key steps

When the stakeholders have identified the problems that the project shall contribute to eliminating, it is time to develop the objectives, to make an objective tree/analysis. If care has been taken on the problem analysis, the formulation of objectives shall not result in any difficulties. The objective analysis is the positive reverse image of the problem analysis.

The analysis of objectives is a methodological approach employed to:

- Describe the situation in the future once identified problems have been remedied;
- Verify the hierarchy of objectives; and
- Illustrate the means-ends relationships in a diagram.

The 'negative situations' of the problem tree are converted into solutions and expressed as 'positive achievements'. These positive achievements are in fact objectives, and are presented in a diagram of objectives showing a **means to ends hierarchy.**
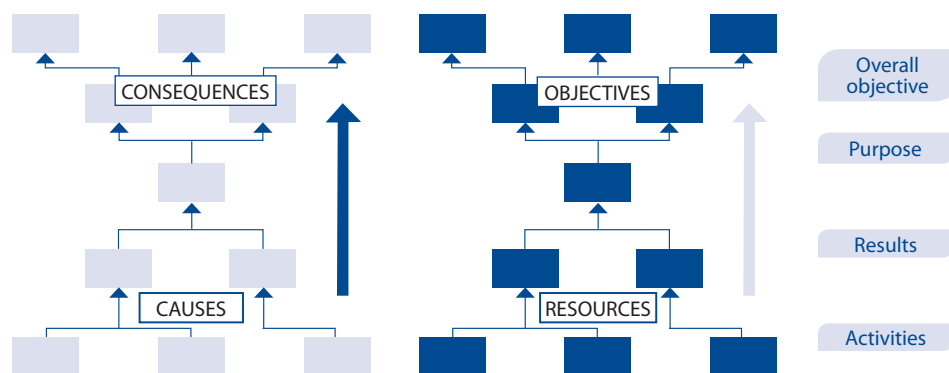
It is a tool to aid analysis and presentation of ideas. Its main strength is that it keeps the analysis of potential project objectives firmly based on addressing a range of clearly identified priority problems.

A well developed objective tree should compose the first column of the matrix as illustrate the figure bellow.

The relationship between the problem analysis, objective analysis and first column of the LFM:

The analysis of objectives should be undertaken through appropriate consultation with key stakeholder groups.

Once complete, the objective tree provides a summary picture of the desired future situation, including the indicative means by which ends can be achieved.
As with the problem tree, the objective tree should provide a simplified but robust summary of reality.

How to conduct objective analysis by establishing an objective tree

Step 1: Reformulate all negative situations of the problems analysis into positive situations that are desirable, realistically achievable

Step 2: Check the means-ends relationships to ensure validity and completeness of the hierarchy (cause-effect relationships are turned into means-ends linkages)

Caution: Every cause-effect relationship does not automatically become a means-end relationship. This depends on the rewording.

Step 3: Work from the bottom upwards to ensure that cause-effect relationships have become means-ends relationships.

If necessary:

- revise statements
- add new objectives if these seem to be relevant and necessary to achieve the objective at the next higher level
- delete objectives which do not seem suitable or necessary

Step 4: Draw connecting lines to indicate the means-ends relationships.

The example of objective tree, following the example of problem tree, is illustrated bellow:

OBJECTIVE ANALYSIS - RIVER POLUTION

Catch and income of fishing families is stabilised or increased

Threat to the riverin ecosystem is reduced and fishing stocks are increased

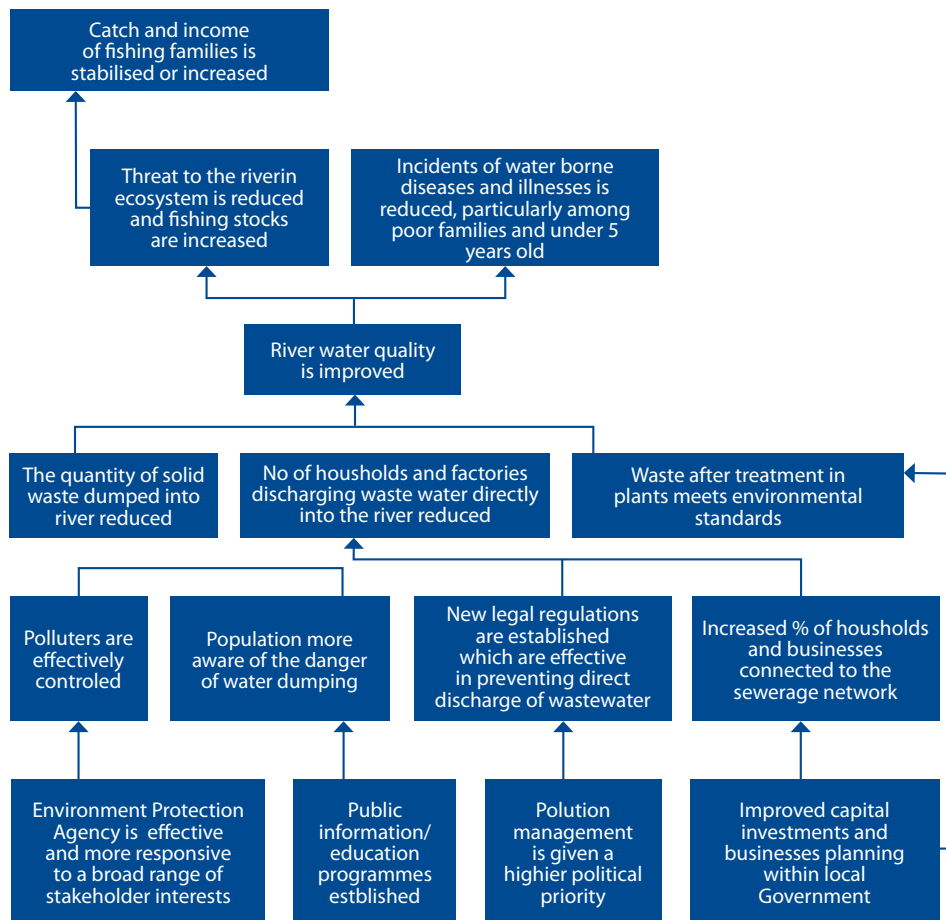Incidents of water borne diseases and illnesses is reduced, particularly among poor families and under 5 years old

River water quality is improved

The quantity of solid waste dumped into river reduced

No of housholds and factories discharging waste water directly into the river reduced

Waste after treatment in plants meets environmental standards

Polluters are effectively controled

Population more aware of the danger of water dumping

New legal regulations are established which are effective in preventing direct discharge of wastewater

Increased % of housholds and businesses connected to the sewerage network

Environment Protection Agency is effective and more responsive to a broad range of stakeholder interests

Public information/ education programmes estblished

Polution management is given a highier political priority

Improved capital investments and businesses planning within local Government

Good practice

- Do not consider objectives that are unrealistic.
- Keep in mind that a conflict between the overall objective and the more concrete objectives (purposes) and interest of the different stakeholders may exist.

Analysis of Strategies/Alternatives

Purpose and key steps

The purpose of this analysis is to identify possible alternative options/strategies, to assess the feasibility of these and agree upon one project strategy.

The Objective Tree usually shows different clusters of objectives that have an inherent means-end linkage. Out of these possible strategies of intervention **the most pertinent and feasible** one is selected on the basis of a number of criteria, including relevance, likelihood of success, resource availability, etc.

This analytical stage is in some respects the most difficult and challenging, as it involves synthesising a significant amount of information then making a complex judgment about the best implementation strategy (or strategies) to pursue.

In practice a number of compromises often have to be made to balance different stakeholder interests, political demands and practical constraints such as the likely resource availability. Nevertheless, the task is made easier if there is an agreed set of criteria against which to assess the merits of different intervention options.

Possible key criteria for strategy selection could be:

- **Strategic:** Expected contribution to key policy objectives (e.g. such as poverty reduction or economic integration, complementarily with other ongoing or planned programmes or projects
- **Social/distributional:** Distribution of costs and benefits to target groups, including gender issues, socio-cultural constraints, local involvement and motivation, etc.
- **Financial:** Capital and operating cost implications, financial sustainability and local ability to meet recurrent costs, foreign ex-change needs, etc.
- **Economic:** Economic return, cost-benefit, cost effectiveness, etc.
- **Institutional:** Contribution to institutional capacity building, Capacity and capability to absorb technical assistance
- **Technical:** feasibility Appropriateness, use of local resources, market suitability, etc.
- **Environmental:** Environmental impact, environmental costs vs. benefits

These criteria should be considered in relation to the alternative options and roughly assessed, e.g. high/low; +/-; extensive/limited. Using these criteria will help to determine what should/can be included within the scope of the project, and what should/cannot be included.

Those objectives which fall under the strategy of intervention are selected to elaborate the hierarchy of objectives in the first column of the Logframe matrix. Objectives at the top of the objective tree are translated into the overall objective, while those objectives further down the tree need to be converted into purpose and results statements.

ANALYSES OF STRATEGY
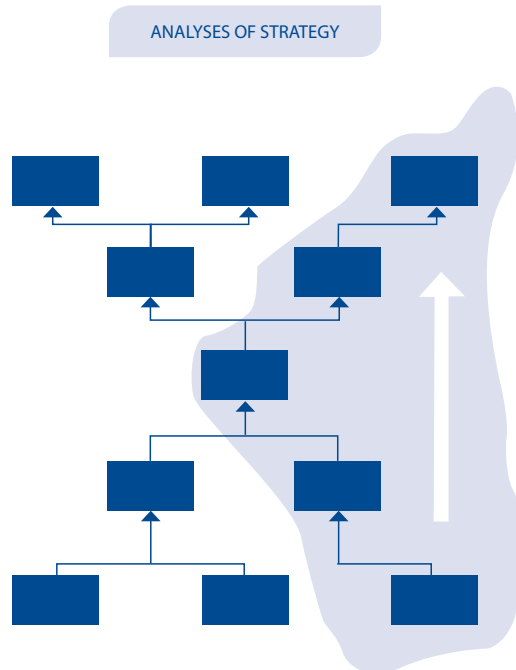
How to conduct analysis of strategies/alternative options

1. Identify differing "means-ends" ladders, as possible alternative options or project components.
2. Eliminate objectives which are obviously not desirable or achievable.
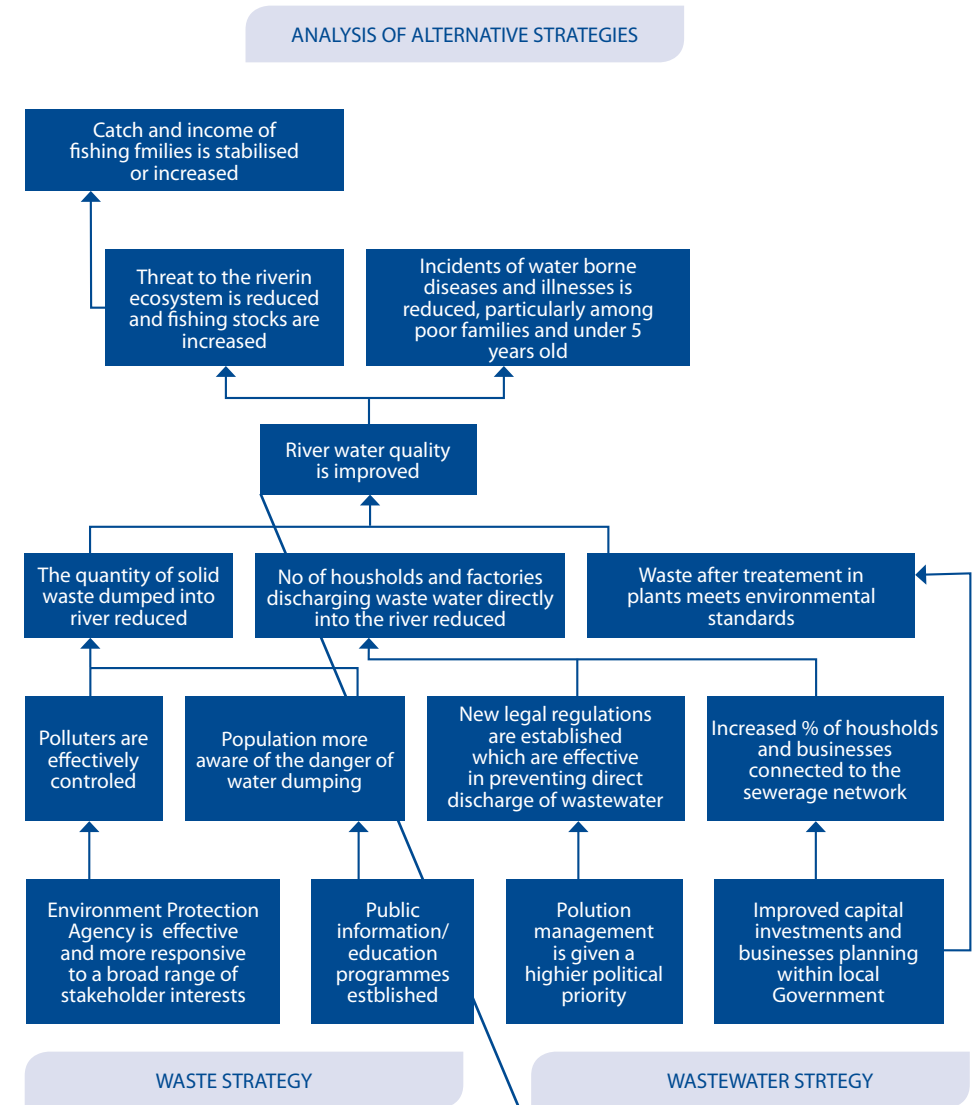3. Eliminate objectives which are pursued by other projects in the area.
4. Discuss the implications for affected groups.
5. Make an assessment of the feasibility of the different alternatives.
6. Select one of the alternatives as the project strategy.
7. If agreement cannot be directly reached, then: Introduce additional criteria, or; Alter the most promising option by including or subtracting elements from the objectives tree.

An example illustrating analysis of alternative options is illustrated bellow:

ANALYSIS OF ALTERNATIVE STRATEGIES

Catch and income of fishing fmilies is stabilised or increased

Threat to the riverin ecosystem is reduced and fishing stocks are increased

Incidents of water borne diseases and illnesses is reduced, particularly among poor families and under 5 years old

River water quality is improved

The quantity of solid waste dumped into river reduced

No of housholds and factories discharging waste water directly into the river reduced

Waste after treatement in plants meets environmental standards

Polluters are effectively controled

Population more aware of the danger of water dumping

New legal regulations are established which are effective in preventing direct discharge of wastewater

Increased % of housholds and businesses connected to the sewerage network

Environment Protection Agency is effective and more responsive to a broad range of stakeholder interests

Public information/ education programmes estblished

Polution management is given a highier political priority

Improved capital investments and businesses planning within local Government

WASTE STRATEGY

WASTEWATER STRTEGY

Good practice

- Note that it is rarely possible to directly transpose the objective tree into the Logframe matrix.
- Further adjustment and refinement of the statements is usually required and the means-ends logic should be constantly checked as the matrix is being developed.
- Ideally only one project purpose is defined. If it is necessary to formulate more than one, consider to divide the project into different components (with component objectives contributing to a single project objective).

2 PART

LOGICAL
FRAMEWORK MATRIX

funds, LFM represents the integral part of the Project Fiche - main document required for project identification.

As already said, the basic matrix consists of four columns and a number of rows (usually three or four rows) as shown bellow. However, some agencies include more rows (levels in the objective hierarchy) to include, for example a summary of indicative activities, a level of 'component objective' (between the result and purpose level), which allows results to be clustered under an identified component heading.

The matrix below illustrates a standard logframe and defines the terminology used.

The Planning Stage - Logical Framework Matrix Preparation

Principles, Format and Terminology

The results of the logical framework analysis are presented and further analysed in the Logframe matrix. The matrix essentially provides a **summary** of the project down to the activity level.

The Logframe consists of a matrix with four columns and four (or more) rows, summarising the key elements of a project, namely:

- The project's hierarchy of **objectives** (Project Description or Project Intervention Logic);
- The **project environment** and key external factors critical to the project's success (Assumptions); and
- How the **project's achievements** will be monitored and evaluated (Indicators and Sources of Verification).

The Logframe also provides the basis on which resource requirements (inputs) and costs (budget) are determined.

Logic of intervention	Objectively Verifiable Indicators	Sources of Verification	Assumptions
Overall Objective			
Purpose			
Results			
Activities	Means	Costs	
			Preconditions

It is recommended to use the log frame as the basis of the funding application and then throughout the project lifecycle to track progress and adapt to changing situations. It can be used to review assumptions and implications, and to keep donors and other stakeholders informed of significant changes. In the context of programming IPA

Standard Logframe matrix and definition of terminology

	Project Description (Intervention Logic, Objective Hierarchy)	Performance Questions and Indicators (Objectively Verifiable Indicators, Targets)	Monitoring Mechanisms (Means of Verification, Source of Verification-information)	Assumptions (External Factors)
	The **intervention logic** of the Logframe identifies what the project intends to do (strategy of intervention) and shows the causal relationship between the different levels of the objectives.	Indicators measure whether the objectives on each level are achieved whereas standards define the level of expected performance	Means of verification indicate where and in what form information on the achievement of objectives and results can be found, e.g. reports of ministries, project reports, laws, statistics, assessments, etc.	Assumptions are conditions which could affect the progress of the project but which are not under direct control of project management. An assumption is a positive statement of a condition that must be met for the project's objectives to be achieved.
Overall objective (Goal, Development Objective)	**What is the overall objective that the project will contribute to?** Definition: Project importance to society in terms of the long-term benefits which are not achieved by the project alone Scope of project management: The project will partially achieve the overall objective	**What indicators are linked to overall objective?** Definition: Measures the extent to which a contribution to the overall objective has been made. Features which can be measured or at least described precisely in terms of quantity and quality respectively and which show a change in situation. Used during evaluation. However, it is often not appropriate for the project itself to try and collect this information.	**What are information sources for these indicators?** Above mentioned	Not required for overall objective
Project purpose (Project Development Objective, Specific Objective)	**What is the purpose of project to be realised by the project?** Definition: Central specific objective(s) of the project in terms of sustainable benefits to be delivered to the beneficiaries. Project purpose describes intended situation at the end of the project. Scope of project management: The attainment of the purpose is primarily dependent on the project results(outputs), but depends also on factors beyond the project's control. Hint: Projects or programmes should have one purpose.	**Indicators showing the extent to which project purpose has been achieved?** Definition: Conditions at the end of the project indicating that the purpose has been achieved. NB: Include appropriate details of quantity, quality and time. Helps understand whether the purpose has been achieved Purpose indicators are commonly used for project reviews and evaluations.	**What are information sources for these indicators?** Above mentioned	Factors and conditions not under direct project control, but necessary to achieve the overall project objective? Hint: To ensure proper vertical logic, it is essential to attribute assumptions to the corresponding level of intervention (in this box assumptions at purpose level which are relevant for achieving the overall objective need to be stated).
Results (Outputs)	**What are concrete visible results to contribute to realisation of project purpose? What changes and improvements will be achieved by the project?** Definition: Tangible products and services delivered or competences and capacities established directly as a result of project activities by the completion date. Scope of project management: Results are under the control / responsibility of project management Hint: For clarity a minimum one result statement for each corresponding project component is recommended.	**What are the indicators showing whether expected results have been achieved?** Definition: Measures of the quantity and quality of results. Result indicators are predominantly used during monitoring and review.	**What are information sources for these indicators?** Above mentioned	Factors and conditions not under direct project control, but necessary to achieve the project purpose? Hint: Formulate assumptions at result level which are relevant for achieving the project's purpose (s).
Activities	**What activities are required and in what order in order to achieve the expected results ?** Definition: Specific tasks (work programme) to be undertaken during the project's lifetime in order to obtain results. (sometimes optional within the matrix itself). Scope of project management: Critical factors for carrying out activities are professional skills, the availability of sufficient financial resources and the absorption capacity of the local partners as well as of the target groups and beneficiaries. Hint: The matrix should not include an entire list of project activities, but focus on **what** the project is to deliver and not on **how**.	**Means** **What resources are required for implementation of listed activities? (by type of PRAG contract)** Sometimes a summary of resources/means is provided. Indicate what are the inputs required, main resources to be applied e.g.: technical assistance, personnel, equipment, training, studies, supplies, etc	**Costs** **What are the costs for each of the means?** Sometimes as a summary of cost and budget is to be provided What are the means/actions costs, breakdown of the budget.	Factors and conditions not under direct project control, but necessary for results to be achieved as planned? Hint: Formulate assumptions at activity / input level which are relevant for achieving project results.
				Preconditions **What pre-requisites must be fulfilled for project implementation to start?** Sometimes optional within the matrix itself

The main point to make is that **the matrix should be used creatively and productively to help design good projects – if a particular user has a good reason to adapt/ modify the format, this should be encouraged rather than frowned upon.**

For example larger programmes which operate for instance in several sectors, could be seen as a set of sub-projects or a set of separate projects where the programme results constitute the purpose of each project as illustrated on the picture.

Each of the programme outputs would constitute the purpose of the different projects. In such cases one should make sure that the programme results (or project purpose) are not conflicting. The trade-off between competing objectives should be spelled out and an order of priority established.
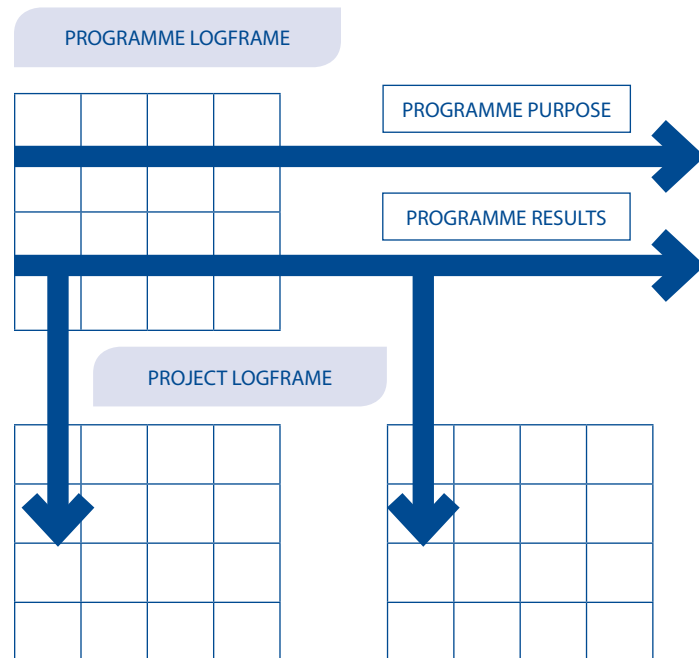
In any case, it is recommended that programmes, as well as projects should **only have one purpose.** This will help clarify priorities and responsibilities and thereby improve management.

The Logframe: Format and Process of Preparation

Adapt the format to the project needs and requirements

The results of the stakeholder, problem, objectives and strategy analysis are used as the materials and preparatory work for developing the Logical Framework Matrix itself. The matrix should provide a summary of the project design, and should ideally be

two pages long. The 'length' of the matrix will depend on the scale and complexity of the project, how many 'objective' levels are included in the matrix, and the skill of the author.

In general, it is recommended that the matrix only includes the project Overall Objective, Purpose and Results (on one page), and a brief summary of indicative activities (on second page).

The main reasons for this are:

- To keep the Logframe matrix focused on the results, purpose and overall objective (results based);
- Activities should be subject to regular review and change (an ongoing management responsibility), and their inclusion in the Logframe matrix means that the matrix must be revised more frequently than is often the case to keep it 'current and relevant'; and
- Indicative Activities are often better presented separately, using either a Gantt chart format and/or a narrative description of the activities in accompanying text. Indicative Activities should nevertheless be clearly linked to planned results through appropriate use of reference numbers.

Similarly, it is recommended that means and costs (the details of inputs and budget) not to be included in the Logframe matrix format. Actually, it is increasingly recognised that the matrix format itself is not suited to providing a useful summary of means and costs, and that there are more appropriate ways/places in which to present this information.

Nevertheless, while it is recommended that neither activities, means/resources, nor costs are included in the matrix itself, the importance of the thinking process –logically linking results, to activities to resources and costs – remains.

Sequence of completion & content

The preparation of a Logframe matrix is an iterative process, not a just a linear set of steps. As new parts of the matrix are drafted, information previously assembled needs to be reviewed and, if required, revised.

Nevertheless, there is a general sequence to completing the matrix, which starts with the project description and logic of intervention (top down), then the assumptions (bottom-up), followed by the indicators and then sources of verification (working across).

The sequence of completion can be illustrated as follow:

Logic of intervention	Objectively Verifiable Indicators	Sources of Verification	Assumptions
Overall Objective (1)	(10)	(11)	(9)
Purpose (2)	(12)	(13)	(8)
Results (3)	(14)	(15)	(7)
Activities (4)	Means (16)	Costs (17)	(6)
			Preconditions (5)

First Column: The Intervention Logic

The **intervention logic** of the Logframe identifies what the project intends to do (strategy of intervention) and shows the causal relationship between the different levels of the objectives. This logic is tested and refined by the analysis of assumptions in the fourth column of the matrix (described below in sub - section on assumptions).

Define the overall objective to which your project contributes

The overall objective is the higher-order objective that you are seeking to achieve through this project, often in combination with others. It usually relates to a programme or a sector. Very often a group of projects will share a common overall objective statement.

Since the Overall Objective/Goal describes the anticipated long term objective towards which the project will contribute (project justification). It is to be expressed as 'To contribute to…..`;

Statements should be kept as clear and concise as possible. If necessary, reformulate the wording from the objectives tree to make them more accurate.

Define the Purpose to be achieved by the project

The **Specific Objective/Purpose** describes the intended effects of the project (project purpose), the immediate objective for the direct beneficiaries as a precisely stated future condition. It is to be expressed in terms of benefits to the target group being 'Increased/improved/ etc.'. This is why the project is proposed. It summarises the impact that the project will have. It may describe how the world will be changed as a result of producing the project's Results. The purpose often describes a change in the behaviour of the project beneficiaries.

There should normally be only one Purpose in a project. The reason for this is very practical. Experience has shown that it is easier to focus project Results on a single

Purpose. If there are several Purposes the project efforts become diffused and the design is weakened. In the case of larger programmes with more than a single purpose, the development of components shall be envisaged (see sub section on project components described below)

Although the Purpose describes the reasons why the Results are being undertaken it is outside the control of the project team. Project team is responsible for producing a certain set of results, but not for what people or institutions will do with those results. This means that the project team should be responsible for achieving certain Results which will help to bring about the desired impact, but it cannot be accountable for achieving the impact.

Define the Results for achieving the Purpose

Results/outputs are expressed as the targets which th project management must achieve and sustain within the life of the project (WHAT do you want the project to achieve). Their combined impact should be sufficient to achieve the immediate purpose. They are to be expressed in terms of a tangible result 'delivered/produced/conducted etc.' They are often described in the Terms of Reference (TOR)[3] for the project. If the necessary resources are available, the project team is directly accountable for achieving these results.

Important

A common problem in formulating objective statements is that the purpose statement is formulated as a re-statement of the sum of the results, rather than as a higher-level achievement. For example in the case of a water treatment project, results leading to the purpose would be formulated as following:

Results:
- direct discharged of waste-water into river reduced
- waste-water tretment standards improwed
- public awareness on environmental management renspisibilities improved

Formulation on purpose	
Bad practice	**Good practice**
Purpose is **sum** of result	Purpose is **consequences** of result
„water treatment is improved and levels of direct discharge into the river reduced ".	improved quality of river water

Define the Activities for achieving each result

Activities are expressed as processes, in the present tense starting with an active verb, such as 'Prepare, design, construct, research …..'. Avoid detailing activities; indicate the basic structure and strategy of the project.

[3] For the definition on Terms of Reference please refer to Annex 3 Glossary

Activities define HOW the team will carry out the project. Generally the aim is to provide an indicative list of activities that must be implemented to accomplish each Result. Supply just enough detail to outline the strategy for accomplishing each Activity, and to provide the basis for a Work Breakdown analysis or more elaborate Activity Chart, Bar Chart, or Gantt Chart.

Note: it is recommended that all results should be numbered. Each activity should then be numbered relating it to the corresponding result. (see example below)

Logic of intervention	Objectively Verifiable Indicators	Sources of Verification	Assumptions
Overall Objective			
Purpose 1. 2.			
Results 1.1 1.2… 2.1			
Activities 1.1.1 1.1.2 1.2.1 2.1.1…	Means	Costs	
			Preconditions

Below is indicated an example of how the statements of the intervention logic column can be formulated: (see also annex 2 formulation of the statements in the logframes)

Objective hierarchy	Example of how to write statements
Overall Objective	To contribute to improved family health, particularly of under 5s, and general health of the riverine eco-system
Purpose	1. Improved river water quality
Results	1.1. Reduced volume of waste-water directly discharged into the river system by households and factories 1.2. Waste-water treatment standards established enforced
Activities *(мay not be included in the matrix itself, but rather presented in an actitvity schedule format)*	1.1.1. Condudct baseline survey of households and businesse 1.1.2. Complete engineering specifications for expanded sewerage netwotk 1.1.3. Prepare tender documents, tender and select contractor 1.1.4. Identify appropriate incentives for factories to use clean technologies 1.1.5. Prepare and deliver public information and awareness program 1.1.6. etc.

Verification of Intervention Logic with IF/THEN test

Once the project strategy has been chosen, the main project elements are derived from the objectives tree and transferred into the first vertical column of the Logframe matrix

Thus, this first column summarises the 'means-end' logic of the proposed project. Indicating the main project elements, it describes the intervention logic of the project.

When the objective hierarchy is read from the bottom up, it can be expressed in terms of:

> **IF** adequate inputs/resources are provided**, THEN** activities can be undertaken;
> **IF** activities are undertaken, **THEN** results can be produced;
> **IF** results are produced, **THEN** the purpose will be achieved; and
> **IF** the purpose is achieved, **THEN** this should contribute toward the overall objective

It can also be read in reverse as we can say that:

> **IF** we wish to contribute to the overall objective **THEN** we must achieve the purpose;
> **IF** we wish to achieve the purpose, **THEN** we must deliver the specified results;
> **IF** we wish to deliver the results, **THEN** specified activities must be implemented; and
> **IF** we wish to implement the specified activities, **THEN** we must apply identified inputs/resources

Project components

Depending on the type and dimension of the project, it can be useful to group sets of closely related project results, activities and inputs into project 'components', particularly for larger/more complex projects.

These 'components' can also be thought of as project 'strategies' which can be identified on the basis of a number of possible criteria, including:

- **Technical focus** (i.e. a research component, a training component and an engineering component within a watershed management project).
- **Management responsibilities/organisational structures** (i.e. extension, research and credit components of an agricultural project to reflect the structure of a Department of Agriculture).
- **Geographic location** (i.e. a component for each of 4 countries involved in a regional people trafficking project).
- **Phasing of key project activities** (i.e. a component for each of the main stages in a rural electrification project which requires a feasibility study, pilot testing, implementation and maintenance stages.

Identifying and agreeing on what might be useful/appropriate components to include in the project should be based on the objectives and strategy analysis, consultation with key stakeholders and consideration of 'what makes sense' from a management perspective.

For larger projects which do have more than one component, consideration can be given to having more than one project purpose (one per component).

This can be a practical way of disaggregating and allocating a significant number of different project results.

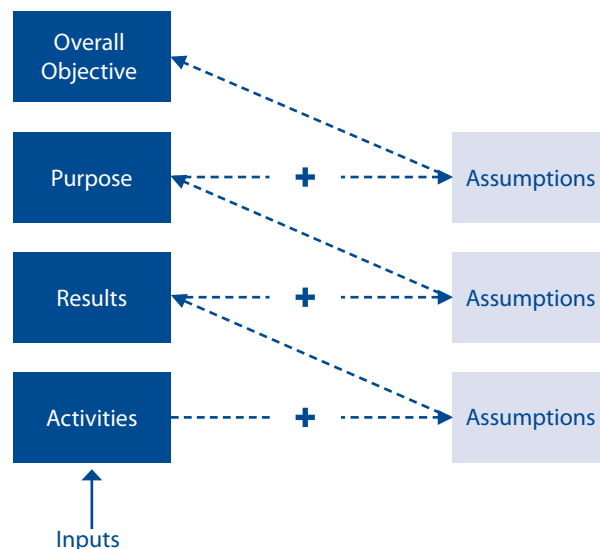## Fourth Column: The Assumptions

Identifying assumptions related to each level of the Logic of Intervention

Assumptions are external factors that have the potential to influence (or even determine) the success of a project, but lie outside the direct control of project managers.

They are the answer to the question: "What external factors may impact on project implementation and the long-term sustainability of benefits, but are outside project management's control?"

The assumptions are part of the **vertical logic** in the logframe. Start from the bottom of the matrix and work upwards.

This **relationship between assumptions and objective hierarchy** is illustrated in the figure below[4].

Examine whether the inputs are sufficient to undertake the anticipated activities or whether additional events must also take place outside the project (assumptions). Identify assumptions at each level in the matrix up to the development objective level upon the following logic:

- once the Activities have been carried out, and if the Assumptions at this level hold true, results will be achieved;
- once these Results and the Assumptions at this level are fulfilled, the Project Purpose will be achieved; and
- once the Purpose has been achieved and the Assumptions at this level are fulfilled, contribution to the achievement of the Overall Objectives will have been made by the project.

Make sure that the assumptions are described in such operational detail that they can be monitored.

Examples of assumptions: fellowship recipients return to assigned positions; local institutions collaborate in planning activities; changes in world prices can be accommodated within given budget; etc. See also example of assumptions indicated in the example below as well as the one in the examples of logframe matrix in annex 2.

Assumptions are usually progressively identified during the analysis phase. The analysis of stakeholders, problems, objectives and strategies will have highlighted a number of issues (i.e. policy, institutional, technical, social and/or economic issues) that will impact on the project 'environment', but over which the project may have no direct control.

Some assumptions can be derived from elements in the objectives tree which were not incorporated into the project.

Additional assumptions might also be identified through further consultations with stakeholders, as the hierarchy of project objectives is discussed and progressively analysed in more detail (i.e. through analysing technical feasibility, cost-benefit, environmental impact assessment, etc).

In brief we can say that assumptions:

- can be derived from the objectives tree
- are worded as positive conditions
- are linked to the different levels in the matrix
- are weighted according to importance and probability

An example of assumptions on different level of the intervention logic is illustrated below:

---

[4] Source : Aid Delivery Methods – Project cycle management guidelines – European Commission – March 2004

Overall Objective
To contribute to improved family health, particularly of under 5 years and the general health of the riverin eco-system

Purpose
Improved quality of river water

Assumptions:
Public awareness campaing by local government impacts positevly on health and sanitation practices of poor families

Result 1:
Volume of waste water directly discharged into the river system by housholds and factories reduced

Assumptions:
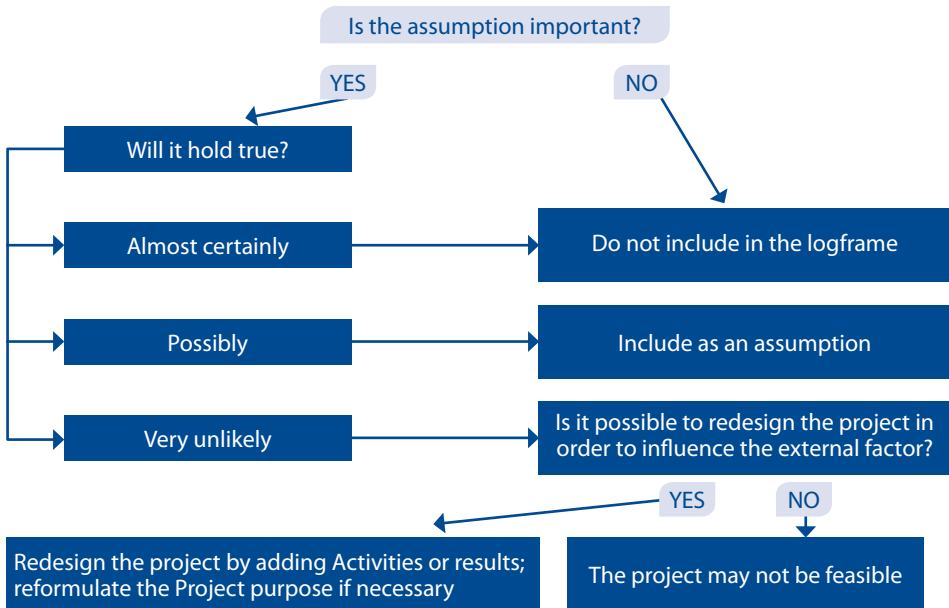River flows mantained above X megaliters per second for at least 8 months of the year
EPA is sucessful in reducing solid waste disposal levels from X to Y per year

Checking the assumptions and their significance

The probability of these assumptions holding true needs to be further analysed to help assess the project's 'feasibility' (probability of success). The probability and significance of assumptions being met is thus part of assessing how 'risky' the project is. Some assumptions will be critical to project success, and others of marginal importance.

The main issue is to assemble and analyse adequate information from an appropriate range of sources, including the different viewpoints of different stakeholders (e.g. what is considered a key assumption to one group, may not be so important to others). There is no set formula for doing this, and some degree of subjectivity is involved.

Go through the list of assumptions one by one at each level of the matrix and check its importance and probability, as shown in the decision making flowchart shown in Figure.

Is the assumption important?

YES — NO

Will it hold true?

Do not include in the logframe

Almost certainly

Possibly — Include as an assumption

Very unlikely — Is it possible to redesign the project in order to influence the external factor?

YES — NO

Redesign the project by adding Activities or results; reformulate the Project purpose if necessary

The project may not be feasible

Assumptions which are either very likely to occur or are not very important for the outcome of the project should be deleted.

If an assumption is determined as being both very important for the outcome but not likely to occur, then it is a killing factor. If killing factors are found, the project must either be changed to avoid these factors, or the project must be abandoned.

Once the assumptions have been analysed and tested, and assuming the project is still considered 'feasible', the only assumptions that should remain in the Logframe matrix are those which are likely to hold true, but which nevertheless need to be carefully monitored during project implementation. They then become part of the project's monitoring and risk management plan.

Each level in the logframe must contain the necessary and sufficient conditions for the next level above.

Second and Third Column: Objectively Verifiable Indicators and Sources of Verification

Once the project description and assumptions have been drafted (columns 1 and 4 of the matrix), the next task is to identify indicators that might be used to measure and report on the achievement of objectives (column 2) and the sources of verification for those indicators (column 3).

Because one reads across the matrix when analysing indicators and means of verification, this is referred to as the **horizontal logic.**

Definition of Objectively Verifiable Indicators at the level of Overall Objective, Purpose and Results

The basic principle of the OVI column is that "if you can measure it, you can manage it". Indicators are performance measures, they tell us how to recognise successful accomplishment of objectives. They define in measurable detail the performance levels required by objectives in the intervention logic and check the feasibility of objectives and the basis of the project's monitoring and evaluation system.

The OVIs tell us not only what accomplishment is necessary, but also what will be sufficient performance to assure that we can reach the next level of objective. For this reason, it is best to begin at the end. That is, begin with the higher order objective and work backwards through the causal chain: Overall Objective, than Purpose, then Results.

Objectively Verifiable Indicators (OVIs) describe the project's objectives in operationally measurable terms, specify the performance standard to be reached in order to achieve the goal, the purpose and the outputs. Therefore OVIs should be specified in terms of Quantity, Quality, Time, Target group, and Place (QQTTP targeting)

Quality - The kind (or nature) of the change, (how well)
Quantity - The scope/extent of the change, (how much, how many)
Timing - When the change should have taken place. (by when)
Target group -(for whom)
Place - Location (where)

Putting numbers and dates on indicators is called Targeting. Although it is often claimed that higher order objectives are not measurable, this is not true. We may choose not to put targets on them, but we can give all of Overall Objective, Purposes and Results indicators and targets.

It is often necessary to establish more than one indicator for each objective statement. For example one indicator may provide good **quantitative** information, which needs to be complemented by another indicator focused on **qualitative** matters (such as the opinions of target groups). However, the fewer indicators the better. Use only the number of indicators required to clarify what must be accomplished to satisfy the objective stated in the Narrative Summary column.

Formulating the Indicator

A good OVI is **SMARTI:**

- **Specific** to the objective it is supposed to measure and substantial, i.e. it reflects an essential aspect of an objective in precise terms.
- **Measurable** either quantitatively or qualitatively, in a factual way. Each indicator should reflect fact rather than subjective impression. It should have the same meaning for project supporters and to informed sceptics.
- **Available** at an acceptable cost, based on obtainable data. Indicators should draw upon data that is readily available or that can be collected with reasonable extra effort as part of the administration of the project
- **Relevant** to the information needs of managers and plausible, i. e. the changes recorded can be directly attributed to the project
- **Time-bound** :– so we know when we can expect the objective/target to be achieved
- **Independent**: indicators should be **independent** of each other, each one relating to only one objective in the Intervention Logic, i.e. to either the Overall Objective, the Project Purpose or to one Result. The same indicator should not be used fro more then one objective. For example, indicators at the level of a Result should not be a summary of what has been stated at the Activity level, but should describe the measurable consequence of activity implementation.

The meaning of an OVI is that the information collected should be the same if collected by different people (i.e. it is not open to the subjective opinion/bias of one person). This is more easily done for quantitative measures than for those that aim at measuring qualitative change.

OVIs should be defined in the early planning stage, even in a preliminary way, just as guiding values with which to analyse the project concept. It will then be further developed at the formulation stage, and specified in greater detail (sometimes reviewed) during implementation when the practical information needs of managers, and the practicality of collecting information, becomes more apparent.

A suggestion of how to formulate an indicator is as follow:

Objective: improved quality of river water

1. Identify indicator: e.g. Concentration of heavy metal compounds (Pb, Cd, Hg) and untreated sewerage

2. Specify target group: water accessible to population

3. Quantify: level of concentration is reduced by 25%

4. Set quality: meet established national health pollution control standards

5. Specify time frame: between 2005 and 2007

6. Set location: Vojvodina

Combine: the level of concentration of heavy metal compounds (Pb, Cd, Hg) and untreated sewerage of the water accessible to population of Vojvodina are reduced by 25% between 2005 and 2007 to meet established national health pollution control standards.

Overall Objective Level Indicators

Overall Objective level indicators often describe the program or sector objectives to which this project and several others are directed. For this reason, the Overall Objective level indicators may include targets beyond the scope of this project.

It is therefore not generally the responsibility of the project itself (or within the project's competence) to collect information on the contribution of the project to this overall objective.

Nevertheless, it is useful for project planners to determine what policy/sector indicators are being used (or targets set), and how this information is being collected (SOV). This can help project managers understand the policy/sector context within which they are working and keep them focused on a longer term vision.

Purpose Level Indicators

The project Purpose is the primary reason for the project to be implemented. But the Purpose very often defines the change in behaviour of project beneficiaries, or the change in the way institutions function as a result of the project's Results. This makes defining the OVIs at Purpose level difficult and complex. the OVIs for Purpose, require QQTTP targeting as much as the Results do. Getting good clarity on Purpose level targets makes setting Results targets much easier.

Results Level Indicators

By definition, these indicators establish the terms of reference for the project. If a project team or contractor is responsible for all the Results, then these indicators define the deliverables for which the contractor is accountable.

Source of Verification

The **source of verification** (SOV), also called means of verification, should be considered and specified at the same time as the formulation of indicators. This will help to test whether or not the indicators can be realistically measured at the expense of a reasonable amount of time, money and effort.

Indicators for which we cannot identify suitable means of verification must be replaced by other, verifiable indicators.

The source of verification should specify:

- **What** information to be made available, (e.g. from administrative records, special studies, sample surveys, observation, etc.)
- **Where**, in what form the information/documented source should be collected (e.g. progress reports, project accounts, official statistical documents, engineering completion certificates etc.)
- **Who** should collect/provide the information (e.g. field extension workers, contracted survey teams, the district health office, the project management team)
- **When/how regularly** it should be provided. (e.g. monthly, quarterly, annually, etc.)

In order to support institutional strengthening objectives, avoid the creation of parallel information systems, and minimise additional costs, firstly check if the required information can be collected through existing systems, or at least through supporting improvements to existing systems.

For example, in reference to the above mentioned example of indicator, the source of verification could be: weekly water quality surveys, jointly conducted by the Environmental Protection Agency and the River Authority, and reported monthly to the Local Government Minister for Environment (Chair of Project Steering Committee).

In general, for the 'big picture', the Bureau of Statistics, local research agencies, donor and business reports may be useful sources. At the local level _ civil society organisations, local government agencies and other service delivery agencies are likely to be keeping records that can provide relevant information to project implementers.

There is often a direct relationship between the complexity of the SOV (i.e. ease of data collection and analysis) and its cost. If an OVI is found to be too expensive or complicated to collect, it should be replaced by a simpler, cheaper and often indirect (proxy) OVI: e.g. instead of conducting a detailed sample survey on incomes of farm households (to measure income increases at the level of the project Purpose or Overall Objective), it may be more practical to assess changes in household assets through a set of case studies.

Check the usefulness of the OVI

1. Is the information **available** from existing sources (statistics, records, etc.)?

2. Is the information **reliable** and up-to-date?

3. Is **special data-gathering** required?

4. If so, do the **benefits** justify the **costs**?

5. Avoid **costly** and/or **unreliable** indicators.

Completing the Draft Logframe Matrix

At the stage of project identification and project preparation, the Logframe would still be in draft form, as further work would need to be undertaken on analysing the indicative activities, and assessing the resource and cost implications.

An example of a how key elements of the logframe might look is indicated in the table below and in **annex 2.**

Remember that while the LFA is presented (for simplicities sake) as a set of broad 'steps', in practice it is an iterative process, with each of the analytical tools being revisited and reapplied as new information comes to light.

Thus while the activity scheduling, resource and cost analysis cannot be **detailed** until the framework of objectives, assumptions and indicators/SOVs has been considered, some preliminary work on activities, resources and costs must be undertaken at the same time as the project purpose and results are being analysed. **Means** are the input data required for the implementation of project activities (consultancy services, equipment, etc). The means show what kind of assistance is required: e.g. twinning with one Resident Twinning Advisor (RTA) and three short-term consultants, training, etc. **Expenses** present the figure of estimated costs needed for the implementation of project activities.

If not, there is the risk that the broader framework of objectives would suddenly be determined to be 'unfeasible' due to practical considerations of cost/resource limitations.

As noted previously in this Guideline, the Logframe matrix can include indicative activities for each result, or not. It is the case for the Means and Expenses. However, whichever option is chosen, there is still a need to think about what the key activities are likely to be, and what are necessary means and expenses needed for the implementation of these activities, otherwise the feasibility of the plan cannot be assessed.

The example of finalised LFM is illustrated bellow:

Logframe example – River Pollution

Logic of intervention	Objectively Verifiable Indicators	Sources of Verification	Assumptions
Overall Objective To contribute to improved family health, particularly to under 5 years old and to improve general health of riverin ecosystem	Incidents of water born diseases, skin infections and blood disorders caused by heavy metals, reduced by 50% by 2008, specifically among low income families living along the river	Municipal hospital and clinic records, including maternal and child health records collected by mobile MCH teams. Results summarised in Annual State of the Environment report by the EPA.	
Purpose Improved quality of river water	Concentration of heavy metal compounds (Pb, Cd, Hg) and untreated sewerage reduced by 25% compared to levels in 2003 and meets established national health/pollution control standards by end of 2007	Weekly water quality surveys jointly conducted by EPA and the River Authority and reported monthly to the Local Government Minister	The public awareness campaign conducted impacts positively on families sanitation and hygiene practices Fishing cooperatives are effective in limiting their members exploitation of fish areas
Results 1 Volume of wastewater directly discharged into the river system by hausholds and factories reduced	70% of waste water produced by factories and 80% of wastewater produced by households is treated in plants by 2008	Annual sample survey of households and factories conducted by municipalities between 2003 and 2008	River flows maintained above X mega litres per second for at least 8 months of the year Upstream water quality remains stable
Etc..			

Checking the Project Design

Whether a project design is the result of a step-by-step participatory work or a less systematic process, it is useful to make a final overall check of the result.

In this section, our main concern shall be the content of the Logframe matrix, the way it is organised is of less importance[5]

The recommendations described in this section can be used when checking the design of an existing project, or when reformulating a project document into the LFA format.

Target groups

Once the project is designed, ensure that the target groups are:

1. Specified in the indicators column at the level of development objective, immediate objective and output.

2. Precisely defined.
If this is not possible, the composition of the target group can be narrowed down e.g. according to one or more of the following criteria:
a) Geographical area, where the majority of the population belongs to the target group
b) Field of activity (e.g. fishing families and industries, health professionals, doctors, stock breeder, cattle farmer)
c) Economic situation, living conditions
d) Needs, access to social services (health, education, etc.)
e) Gender and age
f) Class, caste, ethnicity, social status, etc.

3. Specified at the right project level.

There may be different target groups at different levels in the project cycle management.

Overall Objective

Once the Goal has been formulated, ensure that:
1. It is consistent with the development policy of the partner country
2. It is consistent with the donor's policy guidelines for development aid
3. It represents a sufficient justification for the project
4. It is not too ambitious. (i.e. achieving the purpose will significantly contribute to the fulfilment of the goal)
5. The target groups are explicitly defined
6. It is expressed as a desired end, not as a means (a process)
7. It is expressed in verifiable terms
8. It does not contain two or more objectives which are causally linked (means-ends).

Purpose

Once the purpose has been defined, ensure that:
1. It consists of one single objective
2. The target groups of the project are specified
3. It can be expected to contribute significantly to the fulfilment of the goal
4. It is realistic, i.e. it is likely to occur once the project outputs have been produced
5. It is outside the immediate control of the project itself
6. It is formulated as a desired state, not a process
7. It is precisely and verifiably defined.

Results

Once the outputs have been identified, ensure that:
1. All essential outputs necessary for achieving the purpose are included
2. Only the outputs which can be guaranteed by the project are included
3. Each output can be seen as a necessary means to achieve the purpose
4. All outputs are feasible within the resources available
5. The outputs are precisely and verifiably defined.

Activities

Once activities are describes, ensure that:
1. All essential activities necessary to produce the anticipated outputs are included.
2. All activities contribute directly to the output level above
3. Only those activities to be performed by the project are included
4. Activities are stated in terms of actions being undertaken rather than completed outputs
5. The time available for each activity is realistic
6. The activities are appropriate to the situation in the partner country, in terms of institutions, ecology, technology, culture, etc.

Inputs– Resources:

Once inputs are described, ensure that:
1. The inputs can be related directly to the specified activities
2. The inputs are necessary and sufficient conditions to undertake the planned activities
3. The level of detail is adequate but limited to comprehensibility
4. The inputs are precisely and verifiably defined (quantity, quality, cost)
5. The resources are appropriate for the situation in the partner country, in terms of organisation, gender, culture, technology, environment, etc.

Assumptions

Once assumptions have been formulated, ensure that:
1. They are formulated as desirable, positive conditions
2. They are linked to the correct project level
3. Assumptions which are not important are not included
4. Assumptions which are very likely to occur are not included
5. If there are assumptions which are both important and unlikely to occur (killing factors) the project should either be redesigned to avoid them - or abandoned
6. The remaining assumptions are precisely and verifiably defined.

Indicators

Once indicators have been specified, ensure that:
1. They are specific in terms of quantity, quality, time, location and target group
2. The means of verification is available (statistics, observation, records)
3. If not, check that the information can be generated at reasonable cost
4. It is relevant as a measurement of the achievement of objectives
5. The means of verification is reliable and up-to-date
6. The collection, preparation and storage of information is an activity within the project and the necessary inputs for it are specified in the PM.

Good practice

The application of the LFA should come prior to the development of project proposals in their narrative forms, and provide a base source of information for completing required project documents.

3 PART

LINK TO THE PROJECT CYCLE MANAGEMENT

While previous sections of this guide discussed the LFA in the context of the project design, in this section we briefly look at how the LFA is used as a tool to improve the management of projects throughout their cycle[6].

Project Cycle Management: Basics and Principles

Definitions of project

A project is a series of activities aimed at bringing about clearly specified objectives within a defined time-period and with a defined budget.

For example, development projects are a way of clearly defining and managing investments and change processes.

In the context of the Logical Framework Approach, a project is defined in terms of a hierarchy of objectives (inputs, activities, results, purpose and overall objective) plus a set of defined assumptions and a framework for monitoring and evaluating project achievements (indicators and sources of verification). Logframe matrix, as explained in previous sections of the guide, is a table that summarises main characteristics of the project.

Projects can vary significantly in their objectives, scope and scale. Smaller projects might involve modest financial resources and last only a few months, whereas a large project might involve many millions of Euro and last for many years.

However, disregarding its specific characteristics, a project should have in any case:

- Clearly identified **stakeholders**, including the primary **target group** and the **final beneficiaries;**
- Clearly defined **coordination, management and financing arrangements;**
- A **monitoring and evaluation system** (to support performance management); and
- An **appropriate level of financial and economic analysis**, which indicates that the project's benefits will exceed its costs.

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[6] Sources of this section: "The Logical Framework Approach" – NORAD -1999, "Aid Delivery Methods – Project cycle management guidelines" – European Commission – March 2004

The Purpose of Project Cycle Management

Programme/Project Cycle Management is a term used to describe the management activities and decision-making procedures used during the life-cycle of a programme/project (including key tasks, roles and responsibilities, key documents and decision options).

PCM helps to ensure that:

- projects are supportive of overarching policy objectives of the EC and of development partners;
- projects are relevant to an agreed strategy and to the real problems of target groups/beneficiaries;
- projects are feasible, meaning that objectives can be realistically achieved within the constraints of the operating environment and capabilities of the implementing agencies; and
- benefits generated by projects are likely to be sustainable.

To support the achievement of these aims, PCM:

- requires the active participation of key stakeholders and aims to promote local ownership;
- uses the Logical Framework Approach (as well as other tools) to support a number of key assessments/analyses (including stakeholders, problems, objectives and strategies);
- incorporates key quality assessment criteria into each stage of the project cycle; and
- requires the production of good-quality key document(s) in each phase (with commonly understood concepts and definitions), to support well-informed decision-making.

The Cycle of Operations

Most donors and beneficiaries have their own version of the cycle reflecting their own organisational perspectives and the funding objectives of the programmes they manage.

The first model of project cycle was drawn up by Baum (1970) working for the World Bank.

The Baum cycle originally identified 4 main development stages in the project cycle: (1) identification, (2) preparation (also called formulation), (3) appraisal and selection, (4) implementation.

In a later version (1978) of the cycle, a (5) evaluation stage was added so to "close" the circle, given that evaluation leads to the identification of new projects/programmes.

The Baum cycle is considered to be the "basic" cycle from each all other can be derived.

For example, the "standard" cycle for EU programmes is closely based on the Baum cycle. According to EC Project Cycle Management (PCM) guidelines[7], the cycle of operations for managing the EC's external assistance projects has five phases, as shown on the figure:

Evaluation — Identification — Preparation — Appraisal & selection — Implementation
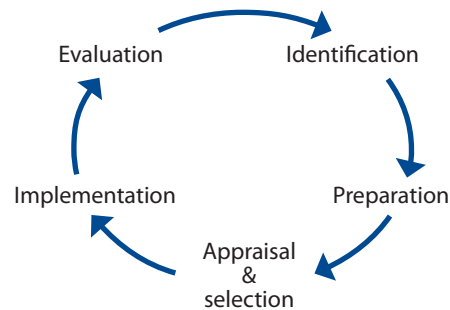
This cycle highlights three main principles:

1. Decision making criteria and procedures are defined at each phase (including key information requirements and quality assessment criteria);

2. The phases in the cycle are progressive – each phase should be completed for the next to be tackled with success.

3. New programming and project identification draws on the results of monitoring and evaluation as part of a structured process of feedback and institutional learning.

Important:

The type of evaluation referred to in this diagram is 'ex-post' or 'after project completion', while it is possible to conduct 'formative evaluations' which take place during implementation (monitoring and project review), as well as ex-ante evaluation (also called appraisal) whose purpose is to assess the relevance of the project proposal, its feasibility (development efficiency, effectiveness), potential impact and sustainability, in a process as systematic and objective as possible.

Evaluation & Audit — Programming — Identification — Formulation — Implementation
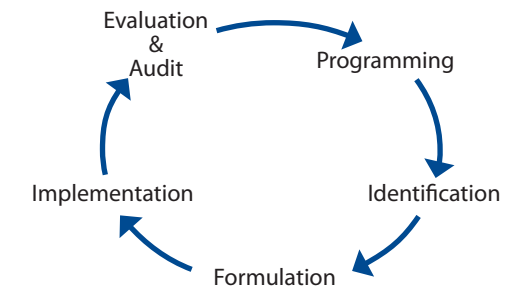
In practice, the duration and importance of each phase of the cycle will vary for different projects, depending on their scale and scope and on the specific operating modalities under which they are set up.

For example, a large and complex engineering project may take many years to pass from the identification through to the implementation phase, whereas a project to provide emergency assistance in a post-conflict context may only take a few weeks or months to commence operations on the ground.

Nevertheless, ensuring that adequate time and resources are committed to project identification and formulation is critical to supporting the design and effective implementation of relevant and feasible projects.

Key Responsibilities and Decision Making Process

In practical terms, practitioners are usually not actively involved in all stages of the project cycle. For example, the one who identify and prepare programmes/projects are rarely the same as those who implement, and usually independent assessors evaluate the performance of both groups.

However, in management terms, considering the cycle as a whole rather than in separate stages can bring advantages.

For example, even though those who prepare the projects may themselves never be involved in the implementation process, a well-prepared project should be developed with awareness of the procedures and practical constraints under which it will be implemented.

It is also to note that there are differences in the way in which financing decisions are made – particularly the timing: the decision to finance can be made at the end of the Identification stage on presentation and approval of a Financing Proposal consisting of an action programme more or less detailed (e.g.: IPA support) while for other donors or programmes, the funding decision is made only after Formulation has been completed.

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[7] http://ec.europa.eu/europeaid/multimedia/publications/documents/tools/europeaid_adm_pcm_guidelines_2004_en.pdf

The key tasks associated with financing decisions are primarily the responsibility of the donor and include:

1. Conduct a quality assessment of the project proposal formulated under a draft project fiche/ financing Proposal;

2. Make any required changes to the draft financing proposal;

3. Approve or reject the financing proposal;

4. For approved projects (individual or under a programme/package) negotiate and conclude (sign) a Financing Agreement(s) between the donor and the implementing partner(s), including the necessary technical and administrative provisions for implementation.

Coordinating the Project Cycle Management in an Integrated Planning

A well-formulated project should derive from an appropriate balance between the National's development **policy** priorities and the donor's development priorities.

Within the scope of these policy priorities, the executive arms of government or nongovernmental agencies formulate under a **programme**, the broad areas of work required to implement policy decisions. Programmes, like projects, may vary significantly in scope and scale. The definition of what a programme is depends essentially on how the responsible authority (ies) chooses to define it.

The general relationship between policies, programmes and projects is illustrated in the figure herein.

Project objectives should therefore contribute to national and sector policies wherever a public sector activity is being supported.

The articulation of projects into programmes contributing to a broader policy objectives requests coordination mechanisms between the programmatic planning of donor's support/external assistance and the planning and budgeting of national resources. Actually, foreign assistance programming mechanism should be aligned and complementary to the programmatic planning and budgeting process of the national resources.

The figure below illustrates this concept in the case of Serbia on the basis of an integrated approach to planning, budgeting, monitoring and reporting at the central level of the government so to engage in towards a more effective implementation of reforms. The corresponding phases of the project cycle management as formulated by the EU are indicated in the figure (see 2.1.3).
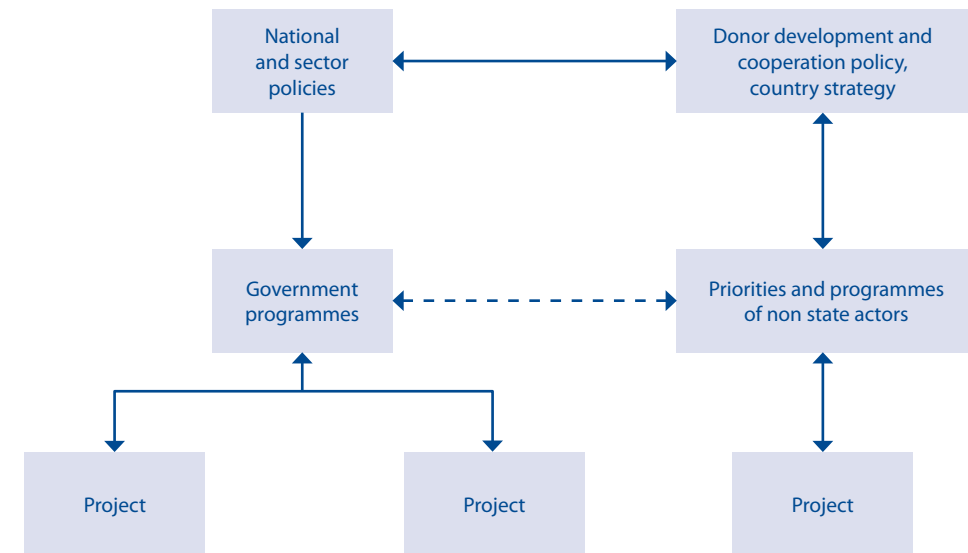
Under this approach, a mid- term planning process methodology is implemented across public administration following up to the definition of mid-term development framework (objectives and programmes/ projects for their achievement) against the realisation of long term commitments of the government (national strategies).

Mid- term planning process methodology
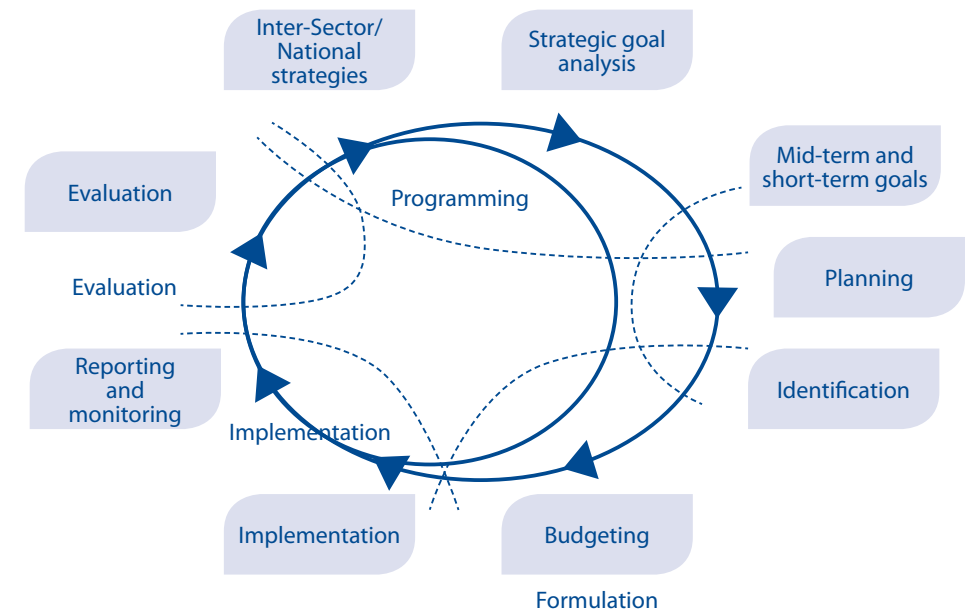
The mid- term plan is a document enabling the management structure to :

- Point out the clear linkage of line ministry plans with priorities and objectives set out in the strategic framework
- Demonstrate the way how particular programs and projects contribute to the achievement of the objectives
- Show an overview of mid-term priorities and objectives (three-year planning)
- Show in detail the annual priorities and objectives
- Relate the resources allocation (human, material, financial) and serve as the basis for budgeting and programming the donor assistance
- Serve as a tool for monitoring and reporting

Using the LFA at Various Phases of PCM

This section describes how the Logical Framework Approach (LFA) is used at various phases of the Project Cycle Management.

It is to note however that LFA does not apply rigorously to projects of all types and sizes in the same way and it may be relevant to distinguish between the following types of projects:

1. Large projects, where the use of considerable resources for planning and design is justified and the use of LFA is a must
2. Experimental projects where the use of LFA is necessary regardless of size
3. Programmes consisting of several projects, where LFA should be used both on the programme itself as well as the individual projects.
4. Small projects, where fewer resources are available for planning, design and the use of LFA
5. Non-projects (event-projects) e.g. financial support, seminars, etc., where it does not make sense to use LFA.

Programming Phase

Purpose

During this phase, the situation at national and sector level is analysed to identify problems, constraints and opportunities which cooperation could address. This involves a review of socioeconomic indicators, and of national and donor priorities. This programming phase, also called planning phase, is often multi-annual.

> At this stage, the relevant questions are: What are the country's development priorities? What do the donors focus on?

The purpose is to identify the main objectives and sector priorities for co-operation, and thus to provide a relevant and feasible programming framework within which programmes and projects can be identified and prepared.

Key assessments and tools

The programming phase should be consistent with the major analytical elements of the Logical Framework Approach to be further used at identification phase. Namely it should:

- Identify key **stakeholders** and assess their needs, interests and capacities;
- Identify and analyse the **priority development problems**/constraints and opportunities;
- Identify development **objectives** which address the identified priority problems; and
- Identify **a strategy for development assistance** which takes account of the proceeding analysis, including capacity constraints, lessons learned from previous experience and the ongoing or planned activities of other donors.

For example for the programming of international assistance in Serbia, a Need Assessment Documents (NAD) is developed and reviewed each year. For the period 2011-2013, the European Integration Office (Department for Planning, Programming, Monitoring and Reporting on EU funds and Development Assistance), prepared a revised version of NAD by introducing the SWAP and eight sectors with identified priorities and measures to focus international assistance.

An indicative programme shall specify:

1. Global objectives: Programming documents set out the strategic choices for co-operation, on the basis of the donor's and Serbia's priorities, making possible the setting of priorities within and across sectors and the choice of appropriate aid delivery modalities (i.e. project, sector programme support and/or budgetary aid);

2. Financial envelopes for each co-operation area including, where appropriate, the indicative timing and size of each instalment of the donor's contributions;

3. Specific objectives and expected results for each cooperation area, including any conditionality and the main performance and outcome indicators. These indicators should relate to developments that are measurable in the medium term. If there is a PRSP process (Poverty Reduction Strategy Paper) under way, the indicators must correspond to those developed within that framework;

4. How crosscutting issues are taken into consideration (gender, environment, etc.); and

5. Programmes to be implemented in pursuit of these objectives, the **targeted beneficiaries** and the **type of assistance** to be provided (e.g. macroeconomic support, technical assistance, training, investment, supply of equipment, etc). Furthermore, project ideas may be formulated and general criteria for their realisation defined (such as geographical area, most suitable partners, suitable duration of projects)

Next steps

The decision options at the end of this phase are to adopt the strategic orientations and areas for cooperation so to proceed to the identification of potential projects, programmes, to be implemented in view of the defined orientations.

> **Important:**
>
> Priorities of the country/region and sector priorities have to be followed.
>
> In the case of Serbia and programming of IPA funds, the outcomes of the programming phase are Multi-Annual Indicative Financial Framework (MIFF) and Multi-Annual Indicative Planning Document (MIPD). Participants in this phase are high level decision makers in the country and decision makers in the partner institution (in our case it is the EU)

Identification Phase

Purpose

Project identification is the phase at which the initial project proposal is conceived and formulated.

At this stage, the project perspective should be very wide. The information available is usually very limited.

> *At this stage, the relevant question is: Is the project concept relevant to priority local needs and consistent with a donor's policy priority?*

The project idea is assessed in relation to:

- development policy and priorities of the country
- the donor's overall guidelines for development aid
- on-going development activities in the country

In the identification phase, the main justification for the project, the description of potential target groups and assumptions which are likely to influence the project, are more important elements than questions of choice of technology and ways of organising the project.

What donors are most interested in is the justification, the context and the anticipated effects of the project, and not the project itself, its outputs, activities and inputs.

Already at this phase it is an advantage to use LFA terminology. A mini- LFA workshop lasting 3-4 hours with 2-3 decision-makers may be a very useful exercise when assessing the feasibility of the project proposed and deciding on the main perspective for a feasibility study.

> **Use of the LFA at identification phase**
>
> - At the **identification** phase, LFA is used to help analyse the existing situation, investigate the relevance of the proposed project and identify potential objectives and strategies for the implementation of the project; (namely use of stakeholder analysis, problem analysis, and preliminary objective setting and strategy analysis)
> - At this phase, the Logframe Matrix provides a summary of key project elements in a standard format, and thus assists those responsible for appraising the scope and logic or proposed investments.

Key assessments and tools

At the end of identification phase, from a project management perspective, the information required about a project, following to key assessments to help ensure the relevance and feasibility of a project idea, should include:

1. Assessment of policy and programming framework (national and from donors)

2. Stakeholder analysis, including institutional capacity assessment;

3. Problem analysis, including scope of crosscutting issues (e.g. gender, governance, environment);

4. Assessment of lessons learned and review of other ongoing or planned initiatives

5. Preliminary objectives and strategy analysis: project description and indicative objective hierarchy

6. Preliminary assessment of resource and cost parameters: indicative resource and cost implications

7. Preliminary assessment of project management, coordination and financing arrangements: indicative coordination, management (including financial management/control) and financing arrangements

8. Preliminary assessment of economic/ financial, environmental, technical and social sustainability issues

9. Follow-up work plan for the Formulation stage

Complementarily to and supportive to the Logical Framework Approach, the PCM documents used to support the development of the project proposal at the identification phase are:

- **Quality assessment criteria.** The criteria and standards provide a checklist of key issues which should be assessed at this stage of the cycle, focusing on the relevance and likely feasibility of the proposed project idea.

- **Institutional capacity assessment[8].** This tool is provided to highlight the key questions that need to be asked and answered in undertaking an institutional capacity assessment.
- **Promoting participatory approaches[9]** (and thus ownership) and using facilitation skills so to provide ideas and guidance during the project management cycle.
- **Preparation of Terms of Reference[10]**, notably for pre- feasibility, feasibility studies and/or project design.
- **Economic and Financial Analysis[11].**

Other technical or sector specific Guidelines can be used as appropriate.

Next steps

The main options depend on whether or not a financing decision is being made at the end of this stage.

Important:

It should be remembered that the identification phase is time consuming. While designing the identification phase all LFA steps should be followed (stakeholder analysis, problem analysis, solution analysis, strategy analysis…). Identification phase should involve as many consultations and interviews as possible.

In the case of Serbia and management of IPA funds the identification phase requires the input of different groups of stakeholders, from public authorities to CSO. The overall quality is guaranteed by EC/EUD supervision. The main output of this phase is the Project Identification Fiches (PIF), which are approved by the European Union Delegation (EUD) and Quality Support Group (QSG).

Formulation Phase

Purpose

The purpose of the Formulation Phase is to:

- Confirm the relevance and feasibility of the project idea as proposed in the Identification Fiche or Project Fiche by a (pre) **feasibility study.**
- Prepare a detailed **project design**, including the management and coordination arrangements, financing plan, cost-benefit analysis, risk management, monitoring, evaluation and audit arrangements; and
- Prepare a **detail planning** including Financing Proposal (for individual projects) and a financing decision

> *At this stage, the relevant question is: Is the project feasible and will it deliver sustainable benefits?*

Use of the LFA at formulation stage

- At the formulation phase, the LFA supports the preparation of an appropriate project plan with clear objectives, measurable results, a risk management strategy and defined levels of management responsibility;
- The tools that make up LFA can be applied to de-construct the proposed project, to further test its relevance and likely feasibility.
- The objectives specified in the Logframe, combined with the activity, resource and cost schedules, provide information to support cost-benefit analysis
- The cost-schedules allow cash-flow implications to be assessed (including the contributions of different stakeholders), and the scope of Financing Agreements to be determined

Key assessments and tools

The information to be produced at the end of the formulation stage can be elaborated via feasibility studies and project design activities. It is summarised in the table below[12]:

Information elements produced by end of Formulation

Situation analysis/ Key assessments	
- Policy & programme context - Stakeholder analysis & institutional capacity assessment - Problem analysis - Lessons learned and review of ongoing/planned initiatives - Strategy selection	
Project description - Overall objective and purpose - Target group, location and duration - Results and indicative activities - Resources and costs	**Management arrangements** - Coordination and management structures - Financial management/financing arrangements - Monitoring, evaluation and audit
Feasibility & Sustainability - Economic and financial - Environmental - Technical -Social and governance - Risk management	

Project design

During project design (or re-design) the basic project structure, the main assumptions and some of the main elements of the monitoring system are identified.

At this stage the perspective is the whole project and its context. The project design, however, should not go into details of the activities and necessary inputs, but merely define the main components.

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[8] *Not included in this guide. For more information, see Aid Delivery Methods – Project cycle management guidelines – European Commission – March 2004*
[9] *Idem above*
[10] *Idem above*
[11] *Not included in this guide. For more information, see Eco-fin Guidelines*

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[12] *Source: PCM Guidelines vol1 –European Commission- March 2004*

Project design can be done as a 6-12 days exercise with a cross-cultural LFA workshop, but it can also be done internally by the donor in less than one day, depending on the scope and the type of the project.

A main advantage with the LFA workshop is that it brings together different parties that will be involved with the project at decision-making and management level. This will help create a common understanding which will strengthen motivation and cooperation during the implementation of the project.

Next steps

For individual projects (with no financial decision yet made) the decision options at the end of this stage are:

- Accept the Financing Proposal, make the Financing Decision and proceed to concluding the Financing Agreement;
- Seek further clarification or amendments to the Financing Proposal before proceeding; or
- Reject the Financing Proposal.

For projects that are part of an approved Programme (i.e. for which the financing decision has already been made at the end of the identification stage), the decision options at this stage merge with those of the implementation phase, namely:

- What further design/formulation work is required before the start of implementation; and
- What are the final tendering/contracting modalities to be used?

Important:

During this phase the project becomes more detailed than in the identification phase. This phase must be carefully designed since all the activities must be implemented. Project implementation will be conducted according to this phase.

In the case of Serbia and management of IPA funds the main output of this phase is the Terms of Reference (ToR) which detail the type of services to be provided. For some complex projects, it is necessary to examine the overall opportunity and/or usefulness of the project. In these situations, expertise is hired to conduct preparatory studies (cost-benefit, feasibility studies, etc...) which will justify or disapprove the financing of the project on qualitative or quantitative arguments. Feasibility study proves that the project's usefulness is bigger its cost and that it can achieve the results and goals.

Implementation Phase, Including Monitoring and Reporting

Purpose

The purpose of the implementation phase is to:

- Manage the available resources efficiently in order to;
- Deliver the results, achieve the purpose(s) and contribute effectively to the overall objective of the project (on the basis of a **detailed planning**)
- **Monitor** and report on **progress**.

> *At this stage, the relevant questions are: Are results being achieved and resources efficiently and effectively used? What corrective action should be taken?*

The implementation phase of the project cycle is in many ways the most critical, as it is during this stage that planned benefits are delivered. All other phases in the cycle are therefore essentially supportive of this implementation stage.

Use of the LFA at implementation stage

- During project/programme implementation, the LFA provides a key management tool to spell out the logic behind the project so that any changes that are necessary conform to overall project design
- The Logframe provides a basis on which contracts can be prepared – clearly stating anticipated objectives, and also the level of responsibility and accountability of project managers and other stakeholders
- The Logframe and associated schedules provide the basis on which more detailed operational work planning can be formulated
- The Indicators and Means of Verification provide the framework for a more detailed Monitoring and Evaluation Plan (both project progress and the impact of the project), to be designed and implemented by project managers
- The Assumptions provide the basis for an operational risk management plan
- The Results, Indicators and Means of Verification (+ activities, resource and costs) provide the framework for preparing project progress reports (to compare what was planned with what has been achieved)

Key assessments and tools

Detailed planning

Not until this phase, when the main characteristics of the project have been established, is it appropriate to make a detailed implementation plan for the project itself, its intended outputs, activities and inputs, as well as its monitoring system, time schedules and budget.

The detailed planning is in many cases done by the project management itself, with or without the use of external expertise.

The **implementation plan should use LFA terminology and format, and the project management should be familiar with LFA.**

One should ensure that the monitoring system designed during the detailed planning will provide a basis for the monitoring not only of physical progress but also of the extent to which objectives are met, i.e. the effect of the project on the target groups and other affected groups.

Monitoring

Monitoring is the continuous or periodic surveillance of the implementation of a project. Not only should the physical progress of the project be monitored, but also the impact of the project, and developments in its environment (external factors).

There should be one format for **monitoring and reporting throughout the life of the project.** This will help provide a solid basis for analysing trends and defining strategies, and will be particularly useful when there is a change of personnel, management and decision makers.

The format of progress reports should be such that **inputs, activities and outputs are monitored with a reference to the purpose and goal and measured with objectively verifiable indicators.**

Changes in assumptions which are relevant to the development of the project should also be registered in the progress report. The progress reports provide a major information input to the project reviews.

These should use a format based on the elements in LFA.

Project review

The project review is a major element in the follow-up of the project by the donor and the partner country. The main perspective during the project review is the physical progress and the achievements of the project.

The purpose is to **provide guidance and make recommendations regarding the strategy and management of the project.**

The project review is undertaken in the partner country and entails discussions with all parties involved, a review of the information available through regular monitoring, and special studies, as appropriate.

A common weakness in many project reviews has been the overemphasis on the technical and operational aspects at the expense of the analysis of the impact and usefulness of the project.

It is of **vital importance,** therefore, that the use of technical/economic expertise is balanced with expertise in general development questions, and that **the Terms of**

Reference for the project review are based on LFA.

The participants in project reviews should be familiar with LFA.

> **Important:**
>
> In case of Serbia and management of IPA, the main participants in the implementation phase are contractor, Contracting Authority (EUD), Beneficiaries, partner institutions, experts, evaluators and auditors. This phase implies implementation of tendering and contracting procedures of different types of contracts (supply, works, services, grants), planning and implementation of project activities (inception phase, implementation phases), budgeting and financial management, reorientation of implementation (if necessary) and continual project monitoring and 'mid-term' evaluation. Outputs of the implementation phase are implemented activities and delivered results. Every project must have a final report which will also contain the final financial report. For supply contracts, equipment is delivered and in use. For works, constructions are realised.
>
> Monitoring also enables the redesign of the project version in order to achieve the best possible quality. In Serbia, as in one of the Western Balkan countries, all monitoring must be conducted along the ROM (Result Oriented Monitoring) system.

Evaluation Phase

Purpose

Evaluations are independent assessments of the impact, relevance and sustainability of the project, undertaken by external collaborators.

The purpose of evaluations is a combination of learning, guidance and control based on an assessment of what has been achieved by the project.

The evaluation is based on a review of existing information, discussions with all parties involved, and impact studies.

> *At this stage, the relevant question is: Were planned benefits achieved, will they be sustained and what lessons have been learned?*

Previously evaluations have often been based on very broad mandates requesting detailed analysis of the developments throughout the life of the project. The result has been a much too detailed analysis at the expense of a more decision-oriented analysis at a higher level.

With an appropriate monitoring system and sufficiently frequent and comprehensive project reviews, there should be no need for detailed historical investigations when

the project is evaluated. Rather, the evaluation team should be able to concentrate on the evaluation itself, i.e. to assess the impact and relevance of the project in relation to its objectives, target groups and other affected parties, and in relation to its inputs.

At this phase, it is an added advantage if **the Terms of Reference for evaluation are based on LFA**, and the team members, in particular the team leader, have extensive knowledge of the method.

Use of the LFA at evaluation and audit stage

- During the evaluation and audit phase, the Logframe matrix provides a summary record of what was planned (objectives, indicators and key assumptions), and thus provides
- The Logframe provides a framework for performance and impact assessment, given that it clearly specifies what was to be achieved (namely results and purpose), how these achievements were to be verified (Indicators and Means of Verification) and what the key assumptions were.
- The Logframe provides a structure for preparing TOR for Evaluation studies and for performance audits.

Key assessments and tools

Comprehensive guidelines and complete methodology on how to plan and conduct evaluations of project and programmes can be found on the European Commission Website:

http://ec.europa.eu/europeaid/evaluation/methodology/egeval/index_en.htm

Important:

They are four types of evaluation : ex-ante evaluation, mid-term evaluation, final evaluation, ex-post evaluation. Evaluations are conducted according to the criteria of project relevance, efficiency, effectiveness, sustainability and impact. Evaluations are systematically conducted by specialised independent consultants which have no (conflict of) interest in the project. Evaluation findings are argument findings, recommendations and conclusions. In the case of Mid-Term evaluation, these conclusions are normally taken in account by the project management team, however the project management team is not constrained to conform to them. Approval of the evaluation report is responsibility of donors, steering committee in the case of large scale projects, and representative of beneficiary institutions.

4 PART

ANNEXES

Annex 1 - LOGICAL FRAMEWORK MATRIX TEMPLATE

Project title		Programme name and number	
Project beneficiary		Contracting period expires:	Disbursement period expires:
	Budget total:		IPA budget:
Overall objective	**Objectively verifiable indicators**	**Sources of verification**	**Assumptions**
What is the overall objective that the project will contribute to?	What indicators are linked to overall objective?	What are information sources for these indicators?	
Project purpose	**Objectively verifiable indicators**	**Sources of verification**	**Assumptions**
What is the purpose of project to be realised by the project?	Indicators showing the extent to which project purpose has been achieved?	What are information sources for these indicators?	Factors and conditions not under direct project control, but necessary to achieve the overall project objective?
Results	**Objectively verifiable indicators**	**Sources of verification**	**Assumptions**
What are concrete visible outcomes to contribute to realisation of project purpose? What changes and improvements will be achieved by the project?	What are the indicators showing whether expected outcomes have been achieved?	What are information sources for these indicators?	Factors and conditions not under direct project control, but necessary to achieve the overall project objective?
Activities	**Means**	**Expenses**	**Assumptions**
What activities are required and in what order to achieve the expected outcomes?	What funds are required for implementation of listed activities? (by type of PRAG contract)	What are the expenses for each of the contracts?	Factors and conditions not under direct project control, but necessary for results to be achieved as planned?
			Preconditions
			What pre-requisites must be fulfilled for project implementation to start?

Annex 2 - SAMPLE LOGFRAME

		Programme number:	
Strengthening of Serbian Environmental Inspectorate and relevant stakeholders		Contracting expires:	Disbursement expires:
		Total budget: EUR 3m	IPA budget: EUR 2m
Overall objective	**Objectively verifiable indicators**	**Sources of Verification**	
To improve quality of natural environment and health of population through effective enforcement of environmental regulations.	Serbia takes measurable steps to improve environment and health issues by end of project	EEA reports EC reports	
Project purpose:	**Objectively verifiable indicators**	**Sources of Verification**	**Assumptions**
To improve the capacity and functioning of the Serbian Environmental Inspectorate at republic, province and local level and improve cooperation with relevant stakeholders.	25% decrease in point-source pollution levels within 5 years of project completion 25% increase in prosecutions within 2 years of project completion	MESP reports Annual Report of Environmental Inspectorate	Continued positive attitude towards EU harmonisation
Results	**Objectively verifiable indicators**	**Sources of Verification**	**Assumptions**
1. Harmonisation of relevant Serbian legislation with Acqui	• Approval of completed Gap Analysis by project mid-point • Full transposition of relevant legislation by end project	EC reports National Gazette	EI willing to make necessary adjustments Quality of TA team Agreement of choice of equipment
2. Improved functioning of Environmental Inspectorate and stakeholders at Republic, Provincial and Local level	• Measurable increase in institutional function and capacity by end project • Measurable increase in technical knowledge of Environmental Inspectorate staff by end project • Fully functioning IPPC capacity at national level • Fully functioning local level inspectorate (water, air, noise, soil etc.) • Number of joint SR/EU pilot inspections up 25% by end project	• MESP and EI reports • Training reports • EEA reports	
3. Provision of appropriate set of inspection equipment	• Procurement and full functioning of equipment by end project	• Commissioning report	

Activities	Means:	Assumptions
1. Harmonisation of relevant Serbian legislation with Acquis with regard to implementation. 1.1. Gap analysis 1.2. Transposition exercise 1.3. Development of enforcement programme 2. Improved functioning of Environmental Inspectorate at Republic, Provincial and Local level 2.1. Development of EI Management Plan (IPPC and other permits - inspection role, equipment requirement) 2.2. Development of operations manuals and guidelines 2.3. Development and delivery of training programme 3. Provision of appropriate set of inspection equipment 3.1. Draw up tender package for set of equipment identified in EI Management Plan 3.2. Tendering 3.3. Handover to EI (with legal guarantee of proper use, repair, maintenance for five years minimum)	Twining contract: EUR 2m Supply contract: EUR 1m	Full cooperation of EI and all other stakeholders at National, Provincial, Local levels

Annex 3 - GLOSSARY

Activities - Actions taken or work performed through which inputs, such as funds, technical assistance and other types of resources are mobilised to produce specific outputs. Actions taken or work performed through which inputs, such as funds, technical assistance and other types of resources are mobilised to produce specific outputs. In the context of the Logframe Matrix, these are the actions (tasks) that have to be taken to produce results.

Activity Schedule - A Gantt chart, a graphic representation similar to a bar chart, setting out the timing, sequence and duration of project Activities. It can also be used to identify milestones for monitoring progress, and to assign responsibility for achievement of milestones.

Analysis of Objectives - Identification and verification of future desired benefits to which the beneficiaries and target groups attach priority. The product of an analysis of objectives is the objective tree/hierarchy of objectives.

Analysis of Strategies - Critical assessment of the alternative ways of achieving objectives, and selection of a set of 'feasible' objective clusters for inclusion in the proposed project.

Assumptions - Hypotheses about factors or risks which could affect the progress or success of a development intervention. External factors which could affect the progress or success of the project, but over which the project manager has no direct control. They form the 4th column of the Logframe, and are formulated in a positive way, e.g.: "Reform of penal procedures successfully implemented". If formulated as negative statements, assumptions become 'risks'.

Audit - An independent, objective assurance activity designed to add value and improve an organisation's operations. It helps an organisation accomplish its objectives by bringing a systematic, disciplined approach to assess and improve the effectiveness of risk management, control and governance processes. The objective of an audit (i.e. an assurance engagement) is for an auditor to evaluate or measure a subject that is the responsibility of another party against identified suitable criteria, and to express a conclusion (i.e. opinion) that provides the intended user with a level of assurance about that subject. In other words: auditing is measuring facts against criteria and reporting a conclusion.

Beneficiaries - Are those who benefit in whatever way from the implementation of the project. Distinction may be made between: (a) Target group(s): the group/entity who will be immediately positively affected by the project at the Project Purpose level; (b) Final beneficiaries: those who benefit from the project in the long term at the level of the society or sector at large, e.g. "children" due to increased spending on health and education, or "consumers" due to improved agricultural production and marketing.

Costs - Costs are the translation into financial terms of all the identified resources ("Means").

Cost-benefit analysis - Cost-benefit analysis involves the valuation of the flow of the project's costs and benefits over time to determine the project's return on investment. A comparison is made between the situation 'with' and 'without' the project to determine the net benefit of the project.

Effect - Intended or unintended change due directly or indirectly to an intervention.

Effectiveness - The extent to which the development intervention's objectives were achieved, or are expected to be achieved, taking into account their relative importance. The contribution made by the project's results to the achievement of the project purpose

Efficiency - The fact that the results were obtained at reasonable cost, i.e. how well means and activities were converted into results, and the quality of the results achieved.

Evaluation - A periodic assessment of the efficiency, effectiveness, impact, sustainability and relevance of a project in the context of stated objectives. It is usually undertaken as an independent examination with a view to drawing lessons that may guide future decision-making.

Evaluation Phase - The fifth and final phase of the project cycle during which the project is examined against its objectives, and lessons are used to influence future actions.

Ex-ante evaluation - An evaluation that is performed before implementation of a development intervention.

Ex-post evaluation - Evaluation of a development intervention after it has been completed.

External evaluation - The evaluation of a development intervention conducted by entities and/or individuals outside the donor and implementing organisations.

Feasibility - Addresses the issue whether the project objectives can really be achieved.

Formulation Phase - The formulation phase is the 3rd stage of the project cycle. The primary purpose of this phase is to: (i) confirm the relevance and feasibility of the project idea as proposed in the Identification Fiche or Project Fiche; (ii) prepare a detailed project design, including the management and coordination arrangements, financing plan, cost-benefit analysis, risk management, monitoring, evaluation and audit arrangements; and (iii) prepare a Financing Proposal (for individual projects) and a financing decision.

Gantt Chart - A method of presenting information graphically, often used for activity scheduling. Similar to a bar chart.

Goal - The higher-order objective to which a development intervention is intended to contribute.

Hierarchy of Objectives - A diagrammatic representation of the proposed project interventions planned logically, following a problem analysis, and showing a means to ends relationship. Synonym: Objectives tree.

Identification Phase - The second phase of the project cycle. It involves the initial elaboration of the project idea in terms of its relevance and likely feasibility, with a view to determining whether or not to go ahead with a feasibility study

Impact - Positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended. The effect of the project on its wider environment, and its contribution to the wider sector objectives summarised in the project's Overall Objective, and on the achievement of the overarching policy objectives of the EC.

Implementation Phase - The fifth phase of the project cycle during which the project is implemented, and progress towards achieving objectives is monitored.

Indicators - Quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a development actor. See OVI "Objectively Verifiable Indicators" and "Development Indicators".

Inputs - The financial, human, and material resources used for the development intervention.

Integrated Approach - The continuous examination of a project throughout all the phases of the project cycle, to ensure that issues of relevance, feasibility and sustainability remain in focus.

Intervention Logic - The strategy underlying the project. It is the narrative description of the project at each of the four levels of the 'hierarchy of objectives' used in the Logframe.

Logical Framework Matrix (Logframe) - Management tool used to improve the design of interventions, most often at the project level. It involves identifying strategic elements (inputs, outputs, outcomes, impact) and their causal relationships, indicators, and the assumptions or risks that may influence success and failure. It thus facilitates planning, execution and evaluation of a development intervention. The matrix in which a project's Intervention Logic, Assumptions, Objectively Verifiable Indicators and Sources of Verification are presented.

Logical Framework Approach (LFA) - A methodology for planning, managing and evaluating programmes and projects, involving stakeholder analysis, problem analysis, analysis of objectives, analysis of strategies, preparation of the Logframe matrix and Activity and Resource Schedules.

Means - Means are physical and non-physical resources (often referred to as "Inputs") that are necessary to carry out the planned Activities and manage the project. A distinction can be drawn between human resources and material resources.

Mid-term evaluation - Evaluation performed towards the middle of the period of implementation of the intervention.

Monitoring - A continuing function that uses systematic collection of data on specified indicators to provide management and the main stakeholders of an ongoing development intervention with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds.

Objective - In its generic sense it refers to Activities, Results, Project Purpose and Overall Objective.

Objective Tree - A diagrammatic representation of the situation in the future once problems have been remedied, following a problem analysis, and showing a means to ends relationship.

Objectively Verifiable Indicators (OVI) - Measurable indicators that will show whether or not objectives have been achieved at the three highest levels of the logframe. OVIs provide the basis for designing an appropriate monitoring system.

Results - The products, capital goods and services which result from a development intervention; may also include changes resulting from the intervention which are relevant to the achievement of outcomes.

Overall Objective - The Overall nObjective explains why the project is important to society, (also sometimes in terms of the longer-term benefits to final beneficiaries and the wider known as the 'Goal') and benefits to other groups. They also help to show how the project/programme fits into the regional/sector policies of the government/ organisations concerned , as well as how the project fits into the overarching policy objectives of EC co-operation. The Overall Objective will not be achieved by the project alone (it will only provide a contribution), but will require the contributions of other programmes and projects as well.

Performance - The degree to which a development intervention or a development partner operates according to specific criteria/standards/ guidelines or achieves results in accordance with stated goals or plans.

Performance indicator - A variable that allows the verification of changes in the development intervention or shows results relative to what was planned.

Problem Analysis - A structured investigation of the negative aspects of a situation in order to establish causes and their effects.

Problem Tree - A diagrammatic representation of a negative situation, showing a cause-effect relationship.

Programming Phase - The first phase of the project cycle during which the Indicative Programme is prepared. See also "Indicative Programme".

Project - A project is a series of activities aimed at bringing about clearly specified objectives within a defined time-period and with a defined budget.

Project Cycle - The project cycle follows the life of a project from the initial idea through to its completion. It provides a structure to ensure that stakeholders are consulted, and defines the key decisions, information requirements and responsibilities at each phase so that informed decisions can be made at each phase in the life of a project. It draws on evaluation to build the lessons of experience into the design of future programmes and projects.

Project Cycle Management - A methodology for the preparation, implementation and evaluation of projects and programmes based on the principles of the Logical Framework Approach.

Project Purpose - The central objective of the project. The Purpose should address the core problem(s), and be defined in terms of sustainable benefits for the target group(s). For larger/complex projects there can be more than one purpose (i.e. one per project component).

Relevance - The extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donors' policies. The appropriateness of project objectives to the real problems, needs and priorities of the intended target groups and beneficiaries that the project is supposed to address, and to the physical and policy environment within which it operates.

Results - In the EC's Logframe Matrix hierarchy of objectives, Results are the tangible products/services delivered as a consequence of implementing a set of Activities. The hierarchy of objectives used by some other donors (and indeed within the context of some EC programmes) refer to these results as 'Outputs'.

Risks - See also "Assumptions". Risk is the probability that an event or action may adversely affect the achievement of project objectives or activities. Risks are composed of factors internal and external to the project, although focus is generally given to those factors outside project management's direct control.

Risk analysis - An analysis or an assessment of factors (called assumptions in the logframe) that can affect or are likely to affect the successful achievement of an intervention's objectives. A detailed examination of the potential unwanted and negative consequences to human life, health, property, or the environment posed by development interventions; a systematic process to provide information regarding such undesirable consequences; the process of quantification of the probabilities and expected impacts for identified risks.

Sources of Verification - They form the third column of the logframe and indicate where and in what form information on the achievement of the Overall Objective, the

Project Purpose(s) and the Results can be found (described by the Objectively Verifiable Indicators). They should include summary details of the method of collection, who is responsible and how often the information should be collected and reported.

Stakeholder Analysis - Stakeholder analysis involves the identification of all stakeholder groups likely to be affected (either positively or negatively) by the proposed intervention, the identification and analysis of their interests, problems, potentials, etc. The conclusions of this analysis are then integrated into the project design.

Stakeholders - Any individuals, groups of people, institutions or firms that may have a relationship with the project/programme are defined as stakeholders. They may – directly or indirectly, positively or negatively – affect or be affected by the process and the outcomes of projects or programmes. Usually, different sub-groups have to be considered.

Sustainability - The likelihood of a continuation in the stream of benefits produced by the project after the period of external support has ended. Key factors that impact on the likelihood of sustainability include: (i) ownership by beneficiaries; (ii) policy support/consistency; (iii) appropriate technology; (iv) environment; (v) socio-cultural issues; (vi) gender equity; (vii) institutional management capacity; and (viii) economic and financial viability.

SWOT Analysis - Analysis of an organisation's Strengths and Weaknesses, and the Opportunities and Threats that it faces. A tool that can be used during all phases of the project cycle.

Target Group(s) - The group/entity who will be positively affected by the project at the Project Purpose level.

Annex 4 - SOURCES OF INFORMATION

1. Aid Delivery Methods – Project cycle management guidelines – Aidco, European Commission – March 2004,
   http://ec.europa.eu/europeaid/reports/index_en.html
2. European Community procedure for implementation of EU-financed external aid programmes and projects:
   http://ec.europa.eu/europeaid/work/procedures/index_en.htm
3. Glossary of terms, PRAG, Annexes,
   http://ec.europa.eu/europeaid/work/procedures/implementation/practical_guide/index_en.htm
4. Glossary of key terms in evaluation and results based management,
   http://oecd.org,data/aoecd.org
5. ISDACON website http://www.evropa.gov.rs/Evropa/PublicSite/index.aspx