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Project Cycle Management and Logical Framework

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ABBREVIATIONS

ACP	Africa, Caribbean e Pacific
ALA	Asia and Latin America
CSP	Country Strategy Paper
DAC	Development Assistance Committee
EC	European Commission
EuropeAid	EuropeAid Co-operation Office
LFA	Logical Framework Approach
LFM	Logical Framework Matrix
M&E	Monitoring and Evaluation
MDG	Millennium Development Goals
MEDA	Countries of the Mediterranean Sea
OECD	Organisation for Economic Co-operation and Development
ONG	Non Government Organizations
OVI	Objectively Verifiable Indicator
PCM	Project Cycle Management
PVS	Developing Countries
SWOT	Strengths, Weaknesses, Opportunities and Threats
ToR	Terms of Reference
UE	European Union

1. INTRODUCTION

In 1992 the European Commission adopted “Project Cycle Management” (PCM) as its primary set of project design and management tools, based on the Logical Framework Approach (Logical Framework Approach – LFA). The PCM was already widely used by many donors, including many Member Nations, and the adoption of the PCM was strongly encouraged by the Development Assistance Committee (DAC) of the OECD (Organisation for Economic Co-operation and Development).

In 1993, the EC produced its first manual that contained the guidelines for project cycle management. The manual was subsequently updated in 2001 and then a second time in 2004.

The main innovations introduced in the new edition can be summed up as follows:

- clarifying the main implications of the EC’s Development Policy with regard to the choice of aid delivery modality (namely projects, sector policy support programmes and/or budgetary aid);
- highlighting the importance of conducting an appropriate level of institutional and organizational capacity assessment during project identification and formulation;
- removing ‘Financing’ as a single stage in the cycle, given that the financing decision is taken at different times depending on the EC Regulation under which projects are financed (sometimes at the end of ‘Identification’ and sometimes after ‘Formulation’), so that the stages have gone from 6 to 5;
- incorporating some additional information on operational tasks and responsibilities at each stage of the cycle;
- providing a set of key quality attributes, criteria and standards (the Quality Frame) that can be consistently applied through the identification, formulation and implementation stages of the project cycle;
- updating the Guidelines on the Logical Framework Approach and providing reference to some additional analytical tools which can support effective PCM.

These guidelines have been prepared to support ongoing improvements in the quality of EC development assistance to partner countries. Quality is defined primarily in terms of the:

- relevance;
- feasibility;
- effectiveness

of the programs and projects supported with EC funds, including how well they are managed.

Learning to create projects according to the standards set out by the European Commission presupposes a better knowledge of the concepts, techniques and tools for Projects which the EC has adopted, along with good field experience.

This Teaching Unit is a summary of the text of the Guidelines published by EC, enriched with several contributions from other authors as well as personal notes. It is a good departure point for those who are just beginning to use the project approach for the first time. It is also a good tool for evaluation and rethinking of the ways and means presently being used in some organizations.

2. THE EUROPEAN COMMISSION DEVELOPMENT COOPERATION POLICY

2.1. PARTNERSHIP STRATEGIES WITH DEVELOPING COUNTRIES

Article 177 of the European Union (EU) Treaty sets out the three broad areas for European Community (EC) development cooperation. These are:

- The fostering of sustainable economic and social development;
- The smooth and gradual integration of the developing countries into the world economy; and
- The campaign against poverty.

Beyond these overarching Treaty objectives, regulations and international agreements based on geographical regions determine the specific EU/EC cooperation objectives. For example:

- Relations between the countries of Africa, the Caribbean and the Pacific (ACP) are set out in the comprehensive trade and development framework of the Lomé convention;
- In Asia and Latin America (ALA) countries, the emphasis is on strengthening the cooperation framework and on making an effective contribution to sustainable development, security, stability and democracy;
- With the Mediterranean (MEDA) countries, emphasis is on the establishment of a zone of peace, stability and prosperity, and on supporting economic and political reform and transition; and
- With select partner countries in Eastern Europe and Central Asia, the TACIS program focuses its activities on institutional and legal reform, private sector and economic development, environmental protection, rural economy and nuclear safety.

In order to fulfil its development objectives the EC is using three action mechanisms, giving attention to their being coherent, complementary and coordinated:

- i. Political dialogue (particular importance is given to dialogue with civil society not only as the one to execute the projects but as a partner in formulating policy);
- ii. Cooperation for development;
- iii. Businesses.

In November 2000, the European Parliament and the Council of Ministers approved the communication of the Commission on the '*Policy of the European Community for Development Cooperation*'. This sets out a new strategic direction for the programming and management of EC development assistance, based on lessons learned from both EC and other international evaluations of donor funded programmes and projects. Guiding principles behind this policy include:

1. ownership by developing countries of their own development process;
2. increased attention to the social dimension of growth and development, including giving priority to poverty reduction and the needs of vulnerable groups (including children, women and the disabled) and
3. an increased focus on 'results'.

To address these challenges, the EC is giving particular attention to:

- promoting the use of Sector Policy Support Programmes and Budgetary Aid;
- increasing decentralisation of responsibilities to the EC's Delegations (this is tied to concepts 1 and 2);
- promoting harmonization with Member States and other donors (concept 3).

2.2. CROSS CUTTING ISSUES

Irrespective of the sector focus, delivery modality (e.g. budgetary aid or projects) or geographic location of EC development assistance, there are a number of critical cross-cutting development issues which must be appropriately addressed throughout the project management cycle. The key cross-cutting development issues include: *good governance* and human rights, gender equality and environmental sustainability.

2.2.1. Good governance

Good governance is defined as: 'The transparent and accountable management of human, natural, economic and financial resources for the purposes of equitable and sustainable development, in the context of a political and institutional environment that upholds human rights, democratic principles and the rule of law'.

The six cornerstones for *good governance* include:

- Support to democratization including support to electoral processes and electoral observation (with an emphasis on participation and accountability)
- Promotion and protection of Human Rights (as defined in the international covenants and conventions, respects of norms and non-discrimination)
- Reinforcement of the rule of law and the administration of justice (as to the legal framework, legal dispute mechanisms, access to justice, etc)
- Enhancement of the role of non-state actors and their capacity building (as a partner in public policy making and implementation)
- Public administration reform, management of public finances and civil service reform; and
- Decentralisation and local government

2.2.2. Equality of rights and non discrimination of women

The United Nations Fourth World Conference on Women held in Beijing in 1995 established gender equality as a basic principle in development cooperation. Gender equality refers to equality of opportunity, rights, distribution of resources and benefits, responsibilities for women and men in private and public life and in the value accorded to male and female characteristics. Promotion of gender equality is not only concerned with women's issues, but also covers broader actions to be taken by both women and men. An essential requirement for gender equality is that women should participate in decision-making and political processes on an equal footing with men.

Gender disparities are deeply entrenched in policies, institutional and legal practices, households and social relations. Equality of rights and non discrimination of women is a cross-cutting issue that needs to be built into all aspects of policy formulation, programme and project planning, institutional structures and decision making procedures.

2.2.3. Environmental sustainability

Sustainable development is development that meets the needs of current generations without compromising the ability of future generations to meet their needs. In this context, environment and natural resources are capital that must be maintained in order to support sustained economic activity. Protecting the environment thus preserves the very basis for development.

Environmental sustainability refers to the need to protect biological and physical systems that support life (e.g. ecosystems, the hydrological cycle and climatic systems). Environmental sustainability is a cross-cutting principle which needs to be integrated across all areas of decision making.

This requires development planners to assess the environmental impact of all proposed policies, programmes and projects, and to take action to minimize the adverse environmental impacts and to take advantage of opportunities for environmental improvement.

3. THE PROJECT APPROACH

3.1. WHAT IS A 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.

The project should also have:

- 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.

3.2. WEAKNESSES OF THE PROJECT APPROACH

The project approach has been at 'the cutting edge of development' for many years, primarily because it has helped meet the accountability requirements of donors. However, significant problems with the 'classical' donor-controlled project approach have also become increasingly evident, namely:

- Inadequate local ownership of projects, with the negative implications for sustainability of benefits;
- The huge number of different development projects, funded by different donors each with their own management and reporting arrangements, has resulted in large (and wasteful) transaction costs for the recipients of development assistance;
- The establishment of separate management, financing and monitoring/reporting arrangements has often undermined local capacity and accountability, rather than fostering it; and
- The project approach has encouraged a narrow view of how funds are being used, without adequate appreciation of the 'fungibility' issue.

The concept of fungibility of aid resources highlights the fact that donor funded projects can simply allow partner governments to re-direct their own financial resources to other purposes (assuming that governments would have spent their own money on the project(s) even if the donor funding was not available). For example, donor funding of Euro 100m to the Health Sector of a particular country could allow the partner government to then use (or 'divert') Euro 100m of its own resources (which it otherwise would have had to allocate to Health) to fund other uses (e.g. internal security or military expenditures). The total effect of donor support therefore depends on how government uses these freed resources (in an economic sense the 'marginal use') and not on the specific project or programme against which the development assistance is specifically earmarked.

Reaching agreement between the partner government and donors on overall public expenditure priorities (i.e. having a donor/partner government policy dialogue on overall objectives and expenditure planning) is thus a way of helping to ensure that fungibility does not compromise the development objectives that donors specifically want to promote/support.

It is as a result of such issues that the EC and member states have decided to significantly increase the use of sector programme and budgetary aid approaches, and to progressively decrease the overall level of funding using the project approach.

3.3. SECTOR APPROACH AND BUDGETORY AID

Budgetary aid transfers and support to Sector Programmes are only appropriate as mechanisms of assistance to the public sector. Thus unlike the project modality, they cannot be used for direct support to the private sector or NGOs

Sector Approaches and Sector Programmes are led by partner governments and they have as their primary goal that of improving the efficiency and effectiveness with which internal and external resources are utilized. In striving to attain this goal, sector approaches share three common objectives:

- ⇒ To broaden ownership by partner Governments over decision-making and respect to sector-based policy, sector-based strategy and sector-based spending;
- ⇒ To increase the coherence between sector-based policy, spending and results through greater transparency, through wider dialogue and through ensuring a comprehensive view of the sector;
- ⇒ To minimise as far as possible the transaction costs associated with the provision of external financing, either by direct adoption of government procedures or through progressive harmonisation of individual donor procedures.

The typical components of a Sector Programme include:

- an approved sector-based policy document and overall strategic framework to know what government is aiming to achieve in the sector and how;
- a sector-based medium term expenditure framework and an annual budget based on a comprehensive action plan;
- a performance monitoring system to measure progress towards the achievement of policy objectives and planned results;
- a formalized process of donor coordination presided over by the government;
- an agreed process for moving towards harmonized systems for reporting, budgeting, financial management and procurement;
- a systematic mechanism of consultation with clients and beneficiaries of government services and with non-government providers of those services.

In the presence of these elements, and according to its own policy for cooperation, the EC can decide to support a Sector Programme or some agreed sub-set of activities within that Programme.

Budgetary Aid is a resource transfer to the government of the partner country. Once received, the transfer is managed by the recipient government, using its existing budget and financial management systems. Thus, it is a way of providing direct support to the implementation of national or sector-based policies,. The EC is thus giving direct support to the carrying out of national policies in the partner country.

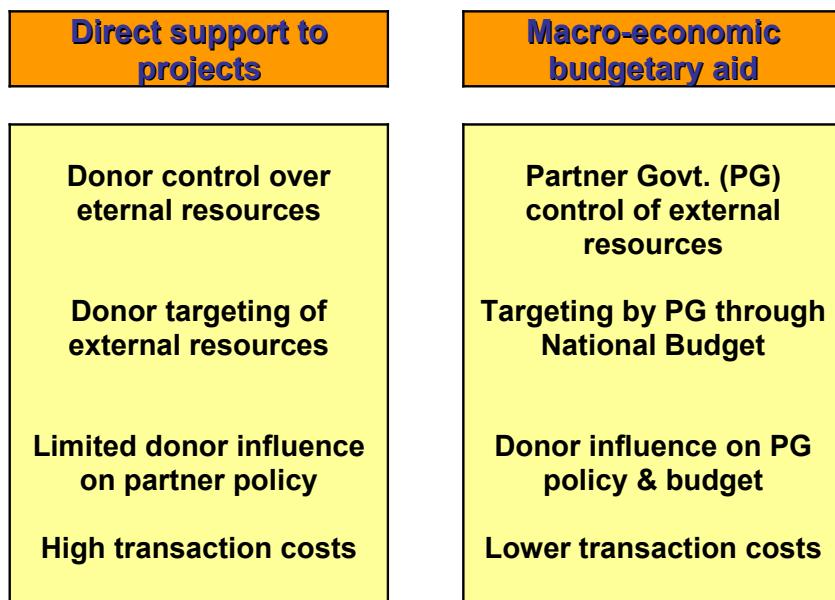
Budgetary Aid can be of two types: Macroeconomic and Sector. The first type supports the overall national development policy and the macroeconomic and budgetary framework; the second type provides additional funding to a specific sector, supporting a stated policy and agreed spending framework. It is clear, then, how budgetary aid – compared to projects – maximise ownership and coherence with national policies, whilst minimising transaction costs.

When considering an appropriate mix of aid delivery methods, four important considerations to be balanced include:

- i) the degree of control donors wish to maintain over their resources;
- ii) who takes primary responsibility for targeting resources;
- iii) the level at which donors and their partners wish to engage in dialogue – policy or project;
- iv) the level of transaction costs associated with managing donor funds.

The following figure shows the characteristics of the two tools, projects and macro-economic budgetary aid. The sector-based programmes and sector-based budgetary aid are part of an intermediate situation.

Figure 1: The mix of aid delivery methods



Within the EC, given the characteristics of the various types of aid, the tendency is to increase the use of budgetary aid and sector-based programmes and to progressively transfer responsibility for the projects to local partners.

The Project method remains preferable for the following:

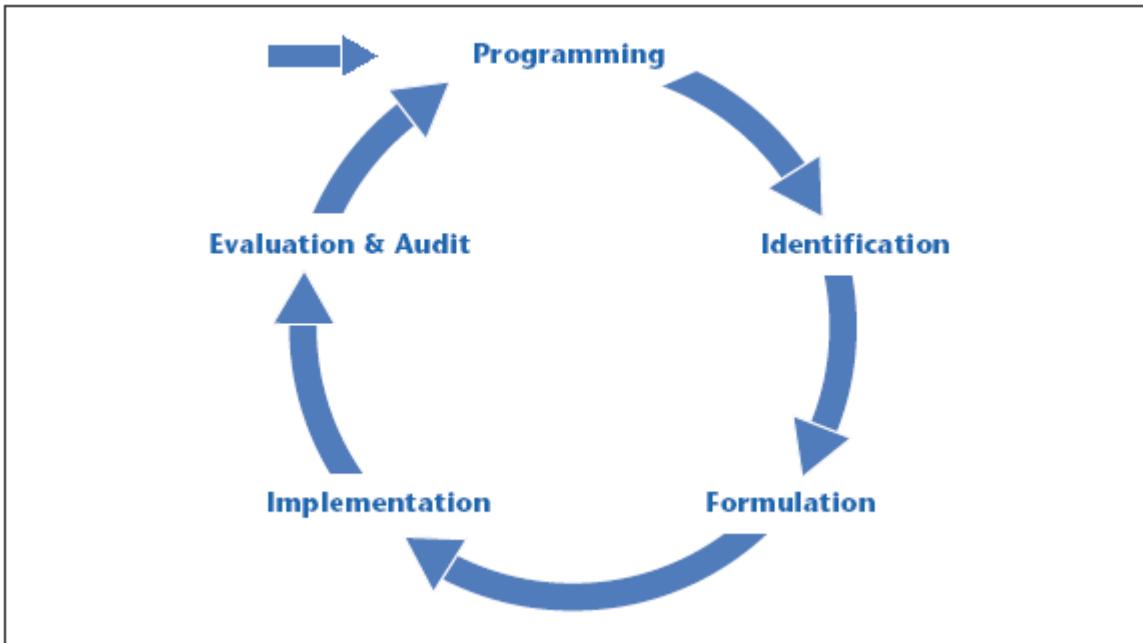
- decentralized cooperation with NGOs, private sectors and civil society;
- emergency interventions (ECHO) and post crisis aid (short term aid and projects with greater flexibility);
- specific technical assistance;
- *capacity building* pilot activity (long term actions which governments do not like when they need to show results in short amounts of time);
- regional activities (here national governments are often hesitant to give aid), especially in the environmental sector;
- investment projects where governments do not yet have the ability to manage the whole process and elevated costs of the transaction;
- countries or sectors that present inadequate conditions for other types of interventions.

4. PROJECT CYCLE MANAGEMENT

4.1. DEFINITIONS

The cycle of operations for managing the EC's external assistance projects has five phases, as shown in Figure 2 below:

Figure 2: The Cycle of Operations



Source: Project Cycle Management Guidelines, Volume 1, European Commission - EuropeAid Cooperation Office, 2004, p. 16

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; and
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.

Project Cycle Management – PCM is a term used to describe the management activities and decision-making procedures used during the life-cycle of a 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 latest version of the EC's Guidelines on PCM, when compared with earlier versions, gives more importance to the concept of quality. The quality of a project is measured in terms of relevance, feasibility and effectiveness. In the Quality Frame these three attributes are subdivided into 16

criteria which are key for evaluating the quality. In each phase of the cycle, the project must be analyzed on these quality criteria, so as to facilitate decision making.

The Quality Frame is shown in Figure 3 below

Figure 3: Quality Frame

Relevant The project meets demonstrated and high priority needs	Feasible The project is well designed and will deliver sustainable benefits to target groups	Effective & well managed The project is delivering the anticipated benefits and is being well managed
<ol style="list-style-type: none"> 1. Consistent with, and supportive of, EC development and cooperation policies 2. Consistent with, and supportive of, Partner Government policies and relevant sector programmes 3. Key stakeholders and target groups are clearly identified, equity and institutional capacity issues analysed, and local ownership demonstrated 4. Problems have been appropriately analysed 5. Lessons learned from experience and linkages with other ongoing/planned projects/programmes have been assessed and incorporated into strategy selection 	<ol style="list-style-type: none"> 6. The objectives (Overall objective, purpose and results) and the work programme (activities) are clear and logical, and addressed clearly identified needs 7. The resource and cost implications are clear, the project is financially viable and has a positive economic return 8. Coordination, management and financing arrangements are clear and support institutional strengthening and local ownership 9. The monitoring and evaluation (M&E) system and audit arrangements are clear and practical 10. Assumptions/Risks are identified and appropriate risk management arrangements are in place 11. The project is environmentally, technically and socially sound and sustainable 	<ol style="list-style-type: none"> 12. The project remains relevant and feasible 13. Project objectives are being achieved 14. The project is being well managed by those directly responsible for implementation 15. Sustainability issues are being effectively addressed 16. Good practice principles of project management are applied by EC Task Managers

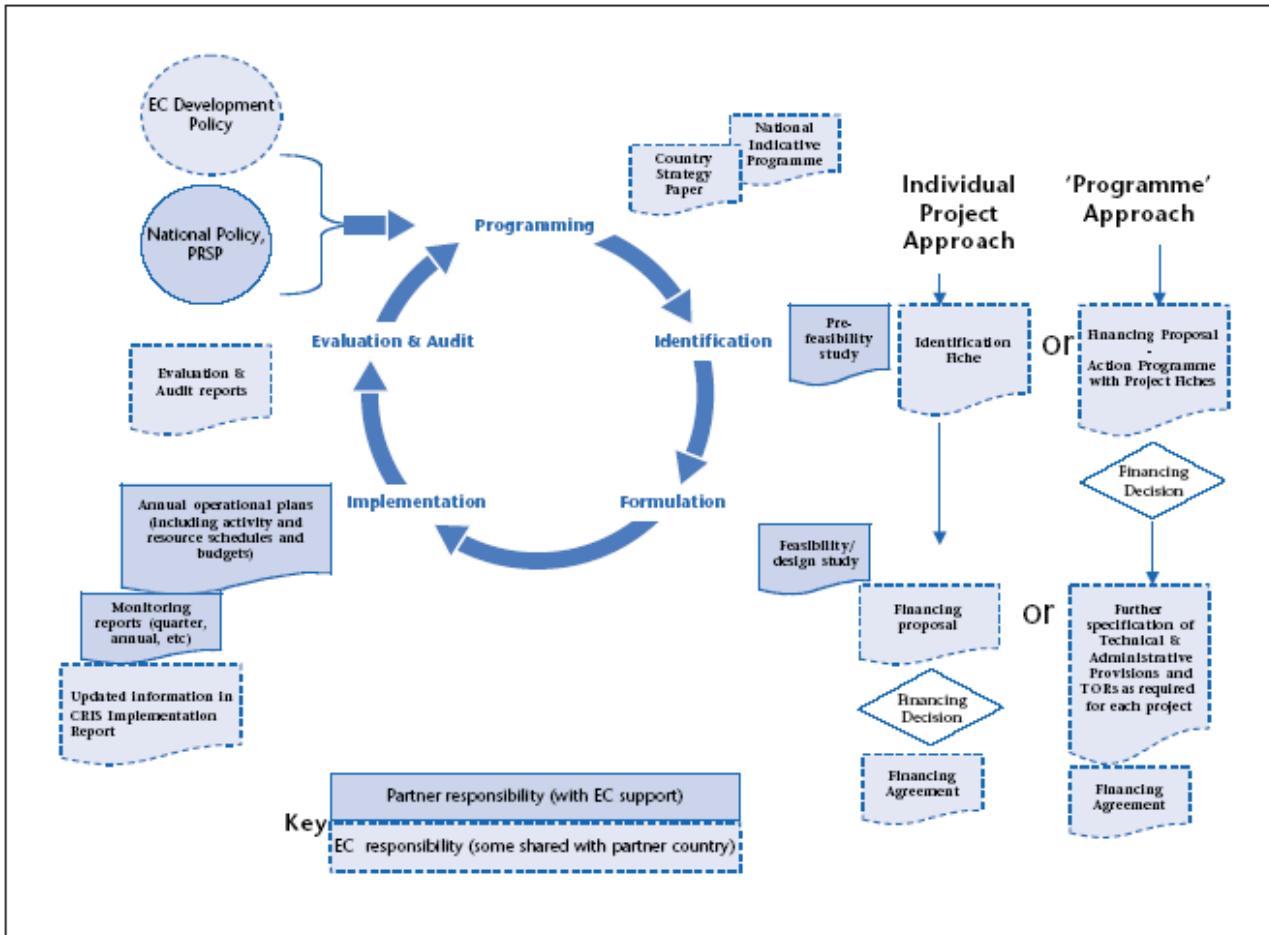
4.2. THE FIVE STAGES OF PCM

As we have already mentioned, the PCM is made up of five stages: programming, identification, formulation, implementation and evaluation/audit.

Before this the project cycle included another stage, the financing of the project, which appeared between the phases of formulation and implementation. The financial mechanisms of CE view financing as an operation that could even come before the formulation of the project, right after the stage of identification. This is the case for programs. So, in the updated guidelines of 2004, this phase has been left out.

The key documents that are produced within the EC project management cycle, and who is primarily responsible, are shown in Figure 4 below:

Figure 4: The project cycle, main documents and responsibilities



Source: Project Cycle Management Guidelines, Volume 1, European Commission - EuropeAid Cooperation Office, 2004, p. 19

4.2.1. Programming

During the programming phase, the European Union establishes the general guidelines and principles for cooperation with a particular Country or Region.

During the Programming 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 socio-economic indicators, and of national and donor priorities.

The documents produced during this phase are the Country Strategy Paper and the National Indicative Programme.

4.2.2. Identification

The purpose of this phase is to identify project ideas that are in line with the development objectives expressed in the programming phase. They can be formulated by a series of actors: national governments of recipient Countries, non-state actors such as civil organizations, NGOs, multilateral or regional development agencies, etc.

During the identification phase the key assessments required to help ensure the relevance and feasibility of a project idea are:

- assessment of policy and programming framework;
- stakeholder analysis, including institutional capacity assessment;
- problem analysis, including scoping of cross-cutting issues;
- assessment of other ongoing and planned initiatives, and assessment of lessons learned;
- preliminary objectives and strategy analysis;
- preliminary assessment of resource and cost parameters;

- preliminary assessment of project management, coordination and financing arrangements; and
- preliminary assessment of economic/financial, environmental, technical and social sustainability issues.

The core PCM tools that can be used include:

- **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.
- **The Logical Framework Approach** – namely stakeholder analysis, problem analysis, preliminary objective setting and strategy analysis;
- **Institutional capacity assessment** 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** and using facilitation skills;
- Preparation of **Terms of Reference**;
- **Economic and Financial Analysis**

The document produced during this phase of the cycle is the feasibility study for the project, which should lead to the decision, on the basis of the analysis itself, to move to the successive phase - formulation.

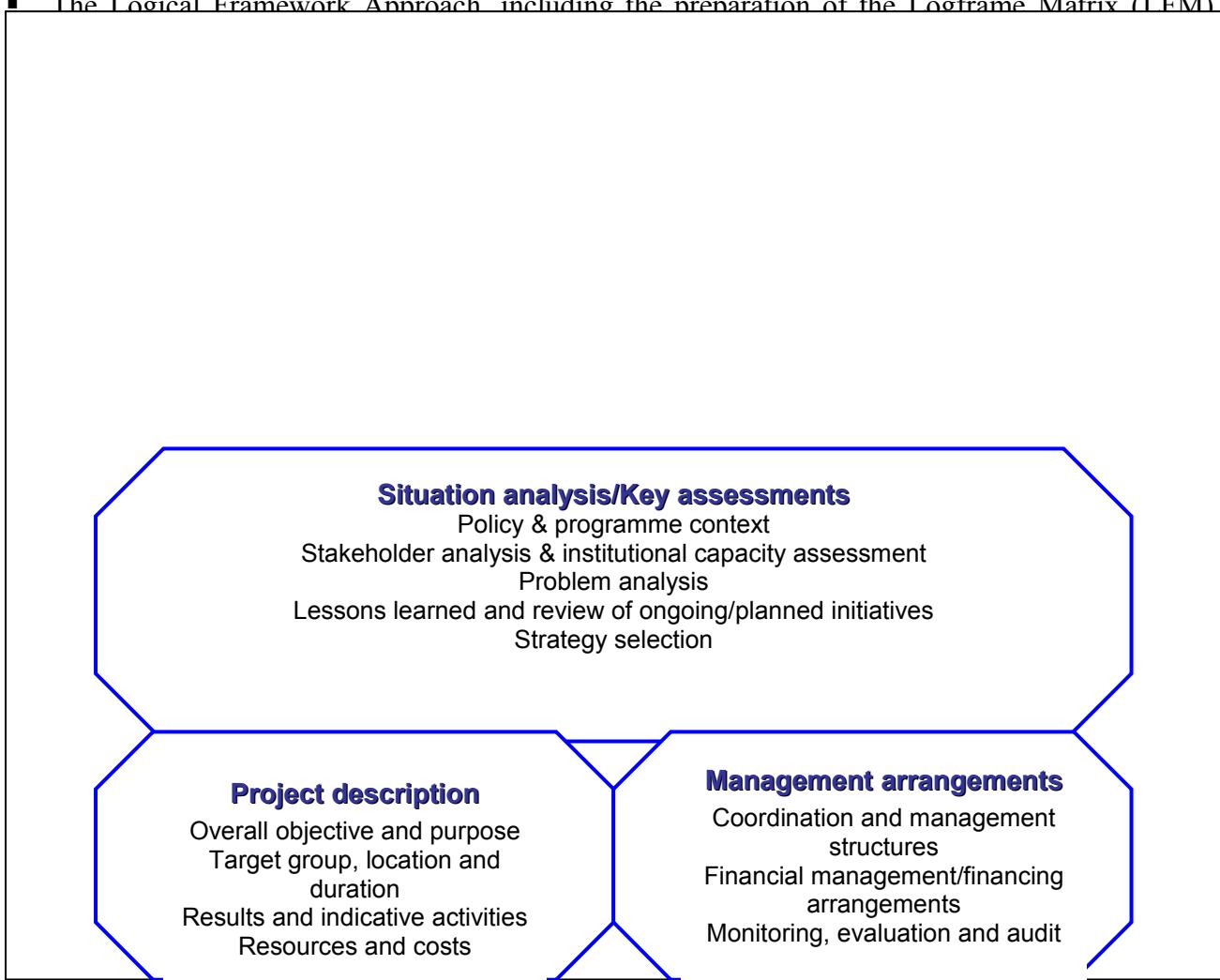
4.2.3. Formulation

The purpose of the Formulation stage is to confirm the relevance and feasibility of the project idea as proposed in the Identification Fiche, and to prepare a detailed project plan.

In this stage too, as in the others, the various stakeholders who have been identified should actively participate in the details of the project.

The tools that can be applied to support the formulation of good quality projects include:

- Quality assessment criteria;
- The Logical Framework Approach including the preparation of the Logical Matrix (LEM)





Source: Project Cycle Management Guidelines, Volume 1, European Commission - EuropeAid Cooperation Office, 2004, p. 38

4.2.4. Implementation, including monitoring and reporting

The purpose of the implementation stage is to:

- ⇒ Deliver the results, achieve the purpose(s) and contribute effectively to the overall objective of the project;
- ⇒ Manage the available resources efficiently; and
- ⇒ Monitor and report on progress.

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

The implementation stage is usually composed of the following main *periods*:

1. the inception period which initiates the process and includes the set-up needs, the definition of contracting arrangements with the various subjects involved, the mobilization of resources, the establishment of working relationships with the stakeholders, the holding of workshops, review and revision of project plan, and the establishment of monitoring and evaluation systems;
2. the main implementation period which includes procuring and deploying resources (including personnel), implementing activities and delivering results, monitoring and reviewing progress, revising operational plans in the light of experience, and reporting on the progress being made;
3. the phase-out period in which all responsibilities are handed over to the local partners, ensuring that maintenance plans are in place, that relevant skills have been transferred, and that recurrent costs are secured.

Key tools that can be used to make these assessments in the PCM include:

- Quality criteria and standards;
- Logframe matrix;
- Activity/work programme schedules and resource/budget schedules;
- Risk management matrix;
- Progress report formats, including CRIS's "Implementation Report";
- Guidance on promoting participation and using facilitation skills;
- Terms of Reference.

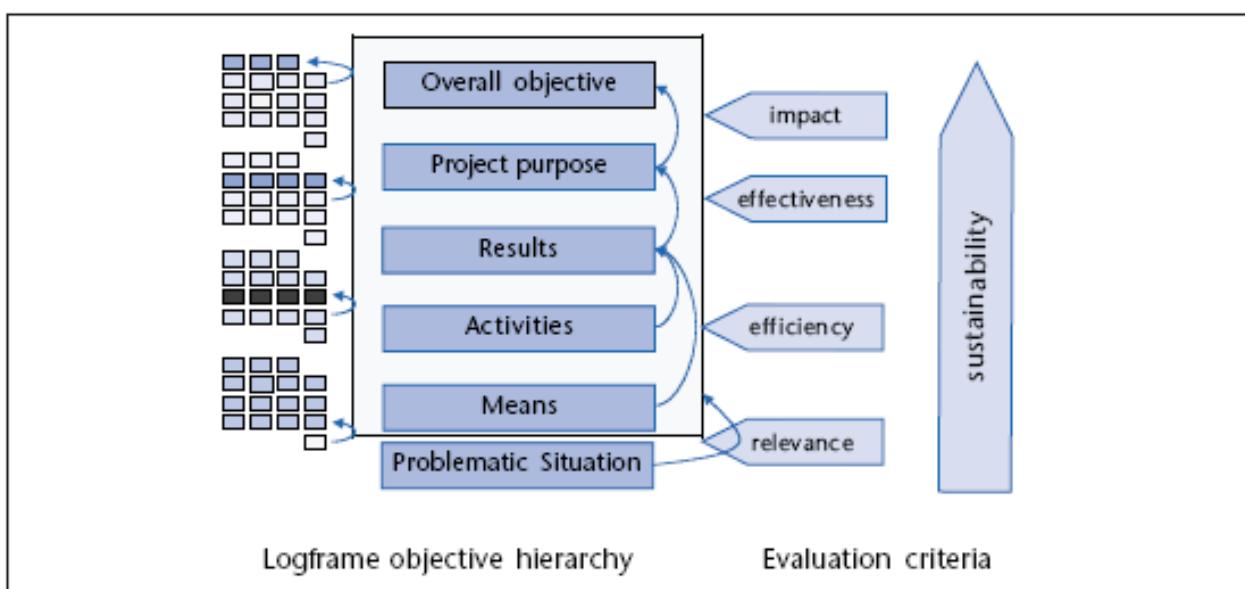
The key documents required/produced during this stage include the operational work plans, periodic progress reports, specific reviews/study reports (e.g. mid-term evaluation), and completion report (at end of project).

4.2.5. Evaluation and audit

The purpose of the evaluation is to make an “*assessment, as systematic and objective as possible, of an ongoing or completed project, programme or policy, its design, implementation and results. The aim is to determine the relevance and fulfilment of objectives, developmental efficiency, effectiveness, impact and sustainability. An evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned into the decision-making process of both recipients and donors.*”¹

The criteria used by the EC for the evaluation of projects are relevance, efficiency and effectiveness, impact and sustainability, which are strictly related to the Logic Frame as we can see in Figure 6 which follows:

Figure 6: Link between Evaluation Criteria and the Logframe



Source: Project Cycle Management Guidelines, Volume 1, European Commission - EuropeAid Cooperation Office, 2004, p. 49

From this diagram we understand how relevance refers to the appropriateness of the project objectives in view of the needs and priorities expressed in the Programming Stage of the Country Strategy Paper and the National Indication Programme.

Efficiency measures the level at which expected results are reached within reasonable costs, looking at the relationship between input and resources used to meet the specified output/results.

Effectiveness measures how well project objectives have been fulfilled.

Impact refers to the effect produced by the project on the wider context into which it was inserted, thus describing its contribution to reaching the general action objectives and priorities expressed in the CSP.

Lastly, sustainability measures the ability of the project to continue producing benefits even after financing from external sources ceases/

¹ OCSE/DAC, 1998: Review of the DAC Principles for Evaluation of Development Assistance.

The tools used during this phase include not only the Logical Framework, but the Evaluation and Audit reports.

There are three types of evaluation:

- Mid-term and on-going evaluation, which takes place during the implementation stage, aims at evaluating the level of fulfilment of project objectives and expected results, thus offering the possibility of introducing corrective measures where needed during the implementation stage;
- Final evaluation, which takes place at the end of the project, evaluates the overall level of fulfilment of project objectives and expected results;
- Ex-post evaluations, which take place after the project has been completed, focuses on evaluating questions of impact and sustainability as well as to draw lessons for future projects and programmes.

Principles underpinning the approach to evaluation are:

- **Impartiality and independence** of the evaluation process from the programming and implementation functions;
- **Credibility** of evaluation, through use of appropriately skilled and independent experts and the transparency of the evaluation process, including wide dissemination of results;
- **Participation of stakeholders** in the evaluation process, to ensure different perspectives and views are taken into account; and
- **Usefulness** of the evaluation findings and recommendations, through timely presentation of relevant, clear and concise information to decision makers.

Evaluation must not be confused with monitoring and audit. The following table presents in a concise manner the characteristics of each of these activities:

Evaluation	Assessment of the efficiency, effectiveness, impact, relevance and sustainability of aid policies and actions
Monitoring	Ongoing analysis of project progress towards achieving planned results with the purpose of improving management decision making
Audit	Assessment of (i) the legality and regularity of project expenditure and income e.g. compliance with laws and regulations and with applicable contractual rules and criteria; (ii) whether project funds have been used efficiently and economically e.g. in accordance with sound financial management; and (iii) whether project funds have been used effectively e.g. for purposes intended. Primarily a financial and financial management focus, with the focus of effectiveness being on project results.

The documents produced during this stage are the Evaluation Reports and Audit Report.

5. THE LOGICAL FRAMEWORK APPROACH

5.1. DEFINITIONS

The Logical Framework Approach (LFA) was developed in the late 1960's to assist the US Agency of International Development (USAID) to improve its project planning and evaluation system.

The LFA has since been adopted as a project planning and management tool by most multilateral and bilateral development agencies. The EC has required the use of the LFA as part of its PCM since 1993.

The LFA is an analytical process and set of tools used to support project planning and management. It is important to distinguish between the LFA, which is an analytic process, and the Logical Framework Matrix (LFM) which, while requiring further analysis of objectives, how they will be achieved and the potential risks, also provides the documented **product** of the analytical process.

Drawing up a LFA has two main stages, **Analysis** and **Planning** which are carried out progressively during the Identification and Formulation phases of the project cycle:

1. During the **Analysis Stage** the existing situation is analyzed so as to develop a vision for the “desired future situation”, and to choose the strategies to apply so as to reach it. The key idea is that projects/programmes are aimed at problems faced by the target group, whether of women or men, and their needs and interests. There are four elements to the **Analysis Stage**:
 - Stakeholder Analysis;
 - Problem Analysis (a view of reality);
 - Analysis of Objectives (image of an improved situation in the future); and
 - Analysis of Strategies (comparison of different options to address a given situation).
2. In the **Planning Stage** the results of the analysis are transcribe into a practical, operational plan ready to be implemented. In this stage the Logframe matrix is prepared, requiring further analysis and refinement of ideas; activities and resource requirements are defined and scheduled; and a budget is prepared.

5.2. THE ANALYSIS STAGE

5.2.1. Stakeholder analysis

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) are defined as '**stakeholders**'. 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 recognized in the process of problem identification, objective setting and strategy selection.

Every society sees differences in the roles and responsibilities of women and men, in their access and control of resources and in their participation in decision making processes. Everywhere we see that access to services (e.g. transportation, health, education) and further economic, social and political opportunities are not equal between women and men. Inequalities due to gender can be an obstacle to growth and can damage development.

Avoiding to adequately face the gender problem could jeopardize the efficacy and sustainability of the projects/programmes, and increase even unintentionally the existing inequalities. It is thus vital to analyze gender differences and inequalities and consider them in the proposed activities, objectives and strategies, as well as in the allocation of resources.

Stakeholder analysis must systematically identify all of the gender differences as well as special interests, problems and the potential of both women and men among the stakeholders.

Ideally the project/programme should be defined in a workshop for participative planning which involves representatives of the principle stakeholders, assuring a balanced representation of the interests of both women and men. Each time the logical framework is reconsidered during the life of the project, it is necessary to go back again to the original stakeholder analysis.

Stakeholder analysis and Problem analysis are closely connected; without the opinion of interested parties on the problem, there will be no clarity on the nature of the problem, nor on the needs of the individuals concerned, nor on the possible solutions.

The following matrix is offered as a tool for collecting information during this phase of analysis:

Figure 7: Stakeholder analysis matrix

Stakeholder ad basic	Interest and how affected by the problems	Capacity and motivation to bring about change	Possible actions to address stakeholder interests

Another tool often used for doing the stakeholder analysis is the SWOT (Strengths, Weaknesses, Opportunities, Threats), which is used to identify the strengths and weaknesses from within, as well as possible threats and opportunities from the outside.

Figure 8: SWOT Matrix

Strengths	Weaknesses
Opportunities	Threats

The PCM Guidelines for the EC describe another two tools which are less used: the Venn Diagram and the Spider Diagram (cf. Project Cycle Management Guidelines, Volume 1, European Commission - EuropeAid Cooperation Office, 2004, pp. 65-66).

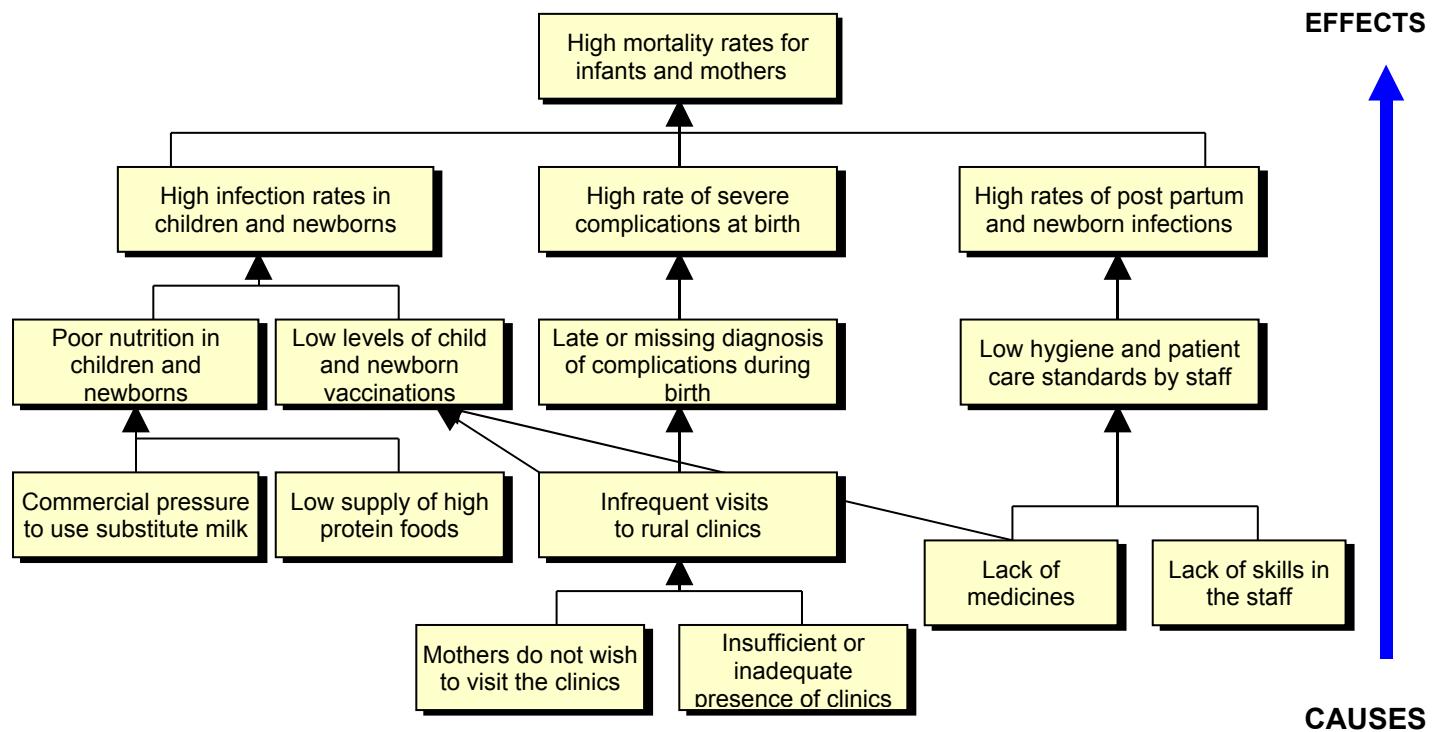
5.2.2. Problem analysis

Problem analysis identifies the negative aspects of an existing situation and establishes the '*cause and effect*' relationships between the identified problems. It involves three main steps:

1. Definition of the framework and subject analysis;
2. Identification of the major problems faced by target groups and beneficiaries; and
3. Visualisation of the problems in form of a diagram, called a "problem tree" or "hierarchy of problems" to help analyse and clarify cause-effect relationships.

A clear problem analysis thus provides a sound foundation on which to develop a set of relevant and focused project objectives. Figure 9 gives an example of a problem tree:

Figure 9: Example of a problem tree



Source: Claudio M. Vitali, *Presentazione su "La progettazione degli interventi nel settore socio-sanitario"*, CEVAS, Gennaio 2005, p. 12.

5.2.3. Analysis of Objectives

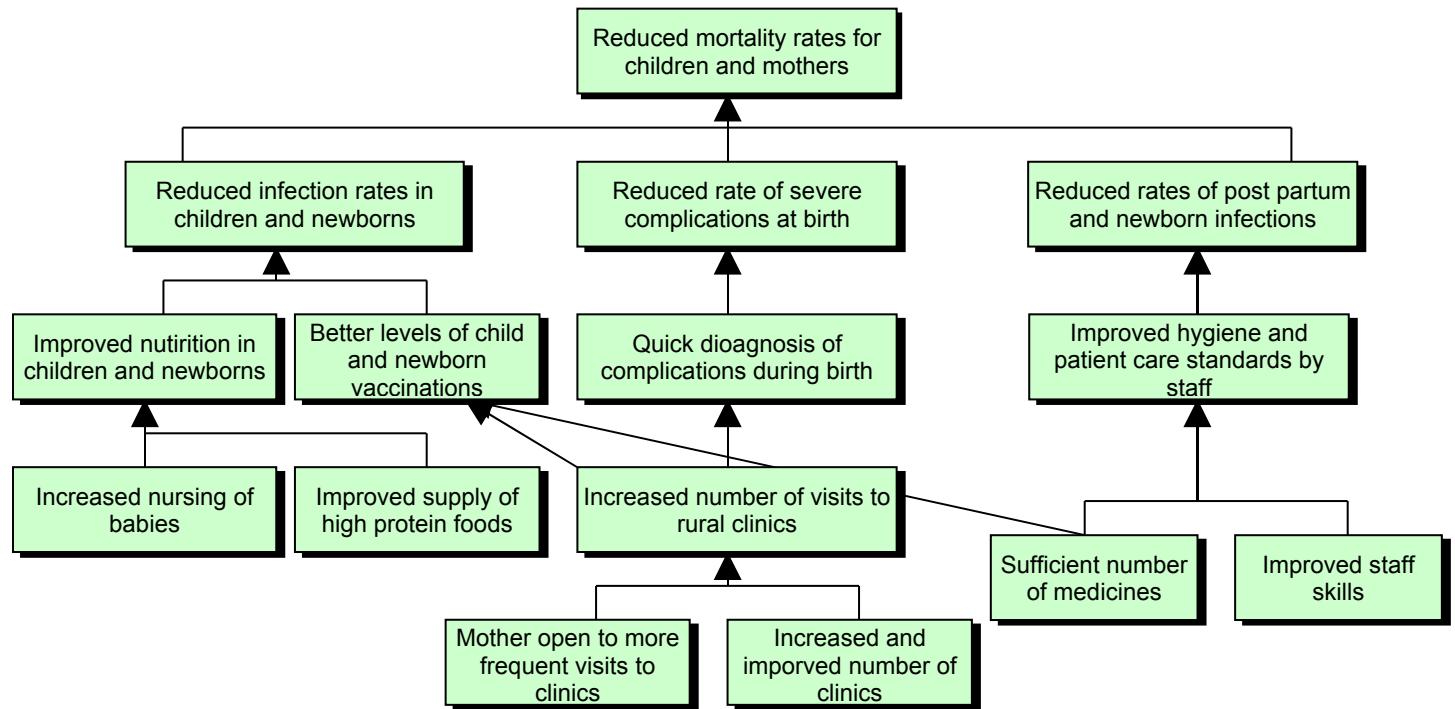
Analysis of objectives is a methodological approach employed to:

- ⇒ Describe the situation in the future once identified problems have been remedied, with the participation of representatives;
- ⇒ 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, expressed as positive achievements. These positive achievements are in fact *objectives*, and are presented in a diagram of objectives showing a **means/ends hierarchy**. This diagram aims to provide a clear overview of the desired future situation.

Often this type of diagram offers some objectives that cannot be fulfilled by the project in question, and must be taken into consideration in other projects. Some objectives may be unrealistic so that alternate solutions must be sought or the efforts to reach them should be dropped.

Figure 10: Example of an objective tree



Source: Claudio M. Vitali, *Presentazione su "La progettazione degli interventi nel settore socio-sanitario"*, CEVAS, Gennaio 2005, p. 15.

5.2.4. Analysis of Strategies

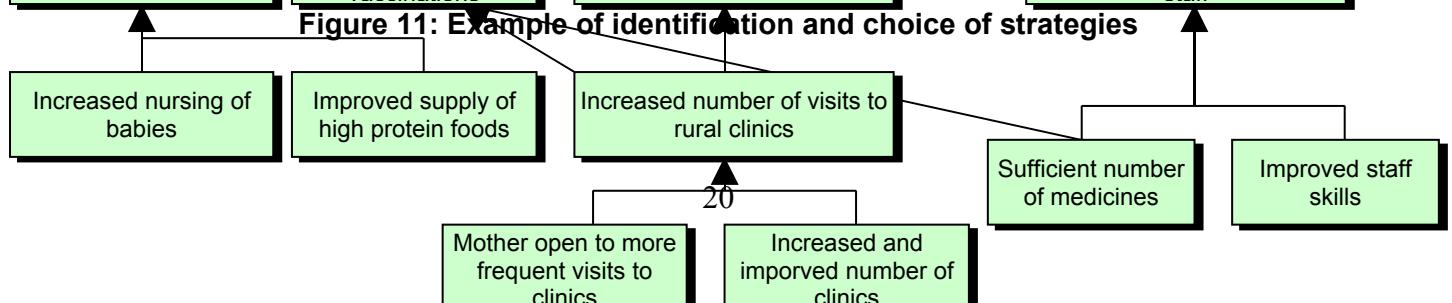
The last step in the Analysis Stage implies the identification of the possible strategies (*clustering*) and the selection of the strategy/strategies that will be used to reach the desired objectives. The analysis of strategies implies deciding which objectives will be included in the project and which will be left out. It also includes selecting the scope of the project (specific objective) and the general objectives. In other words, different groups of objectives of the same type will be clustered, and each of these groups of objectives represents a possible project strategy.

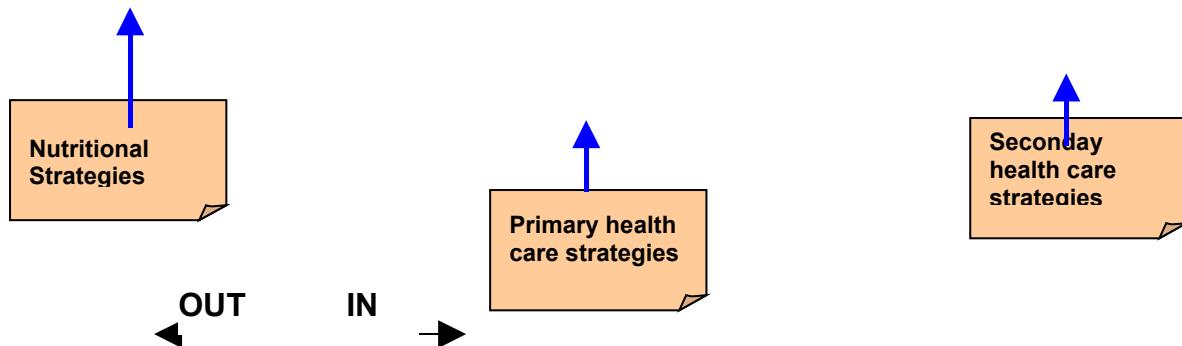
The choice of strategy to follow is made on the basis of an agreed set of criteria which may include: priorities of the stakeholders (both women and men), probability of success, budget, relevance of the strategies, timeframe for realizing the project, its contribution to the reduction of inequalities, including that of gender inequality, etc.

The Analysis of Strategy requires the following steps:

- Identification of the various possible strategies through clustering of the objectives
- Clear criteria for choosing the strategies;
- Clarification of the scope of the project

Dependent on the specific and general objectives addressed, the strategies chosen may be a simple project or a programme that consists of a certain number of projects.





Source: adapted from Claudio M. Vitali, *Presentazione su "La progettazione degli interventi nel settore socio-sanitario"*, CEVAS, Gennaio 2005, p.17.

5.3. THE PLANNING STAGE

During the planning stage, the results obtained during the preceding analysis are transferred to an operative plan ready to be implemented. This stage of planning is articulated in three distinct moments:

1. preparation of the logical matrix LFM;
2. definition of the working plan, which includes writing the timeline (which shows the position of each activity in a timeframe) and the programming of the resources;
3. preparation of the budget.

5.3.1. *The matrix format*

The Logical Framework is a way of representing the substance of the project/programme in a synthesis which includes everything and is easily understood. The matrix has four columns and four rows.

The vertical lines identify what the project intends to do, clarifies the relationship of cause and effect, and specifies the presuppositions and important uncertainties which are outside the control of the project manager.

The horizontal lines refer to effects and resources used by the project, making reference to specific key indicators and to the sources from which the indicators can be verified.

The following figure show the typical structure of the Logframe Matrix:

Figure 12: The Logframe Matrix

	Project Description	Indicators	Source of Verification	Assumptions
Overall objective				
Purpose				
Results				
Activities		Means	Costs	
				Prerequisites

The preparation of a Logframe matrix is an interactive process, not 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 (top-down), then the assumptions (bottom-up), followed by the indicators and then sources of verification (working across). This general sequence is illustrated in the following figure:

Figure 13: Sequence for compiling the Logframe matrix

	Project Description	Indicators	Source of Verification	Assumptions
Overall objective	1	8	9	
Purpose	2	10	11	7
Results	3	12	13	6
Activities	4	Means	Costs	5
				Prerequisites

5.3.1.1. First Column: Intervention Logic

The first column of the Logframe matrix summarises the ‘means-end’ logic of the proposed project (also known as the ‘intervention logic’).

- The fourth line gives the activities to realize;
- If these activities are carried out, the desired results should come about;
- Collectively, the results should help fulfil the specific objective;
- The specific project objective contributes to fulfilling the general objectives.

The four levels of intervention logic are defined as follows:

- i. The general objectives of the project/programme explain why the project/programme is important for society, in long term benefits for the stakeholders as well as benefits that can be generalized to other groups. They also show how the project/programme is part of the government’s regional/sector policies, those of interested organizations and of the EC, as well as policies that aim at cross-section cooperation within the community.

The project is not the only means for reaching the general objectives (it is only a contribution to reaching the general objectives), since a series of convergent projects and other interventions can lead to fulfil these objectives.

In terms of their expression, the objectives should be linked to the problems which emerged from the analysis; they should be expressed in terms of improvement, empowerment, enlargement, greater capacity for, etc.

ii. The project's specific objective is the purpose to be met with the realization of the project, that is, the flow of benefits, duration and clarifications identified, which the project intends to produce for the stakeholders.

Thus, the specific objective should address the central problem and be defined in terms of sustainable benefits for the target group/s. The specific objective should also express the equal distribution of benefits between women and men within the target group/s.

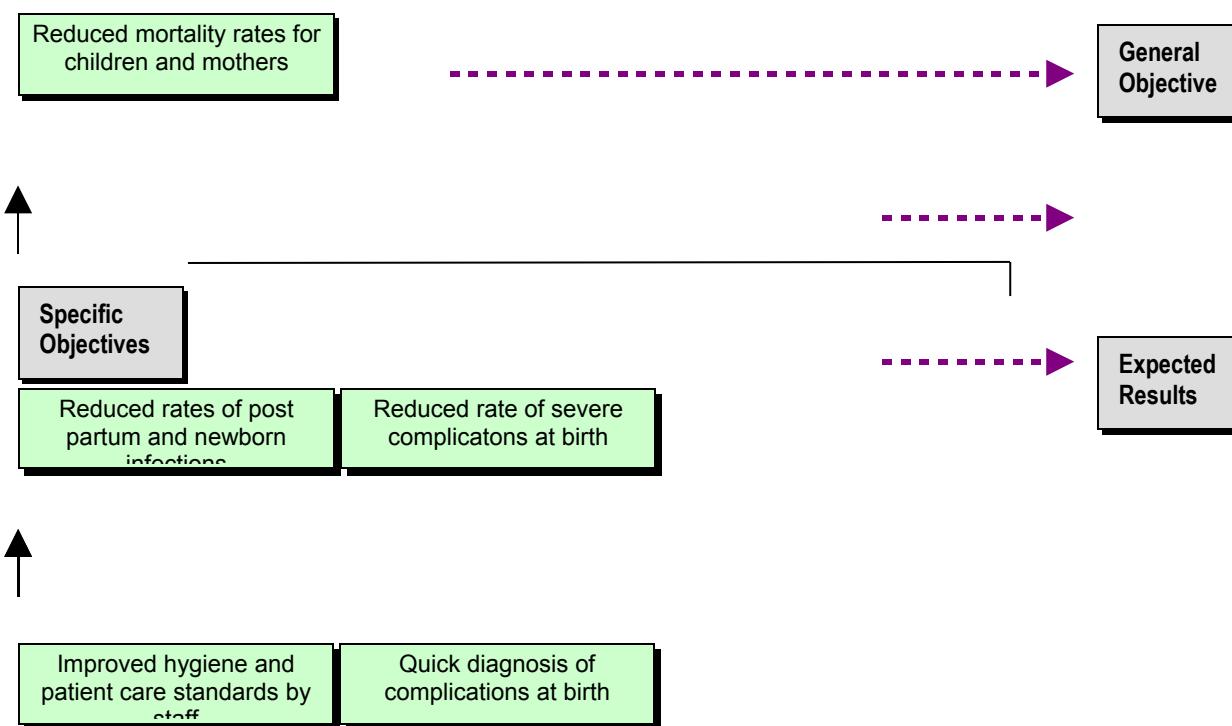
There should be only one specific objective for each project. Projects with multiple purposes usually have unclear or conflicting objectives. In projects that have multiple components several objectives should be clearly specified, one for each component of the project. In this case the project will be complex and could eventually have management problems.

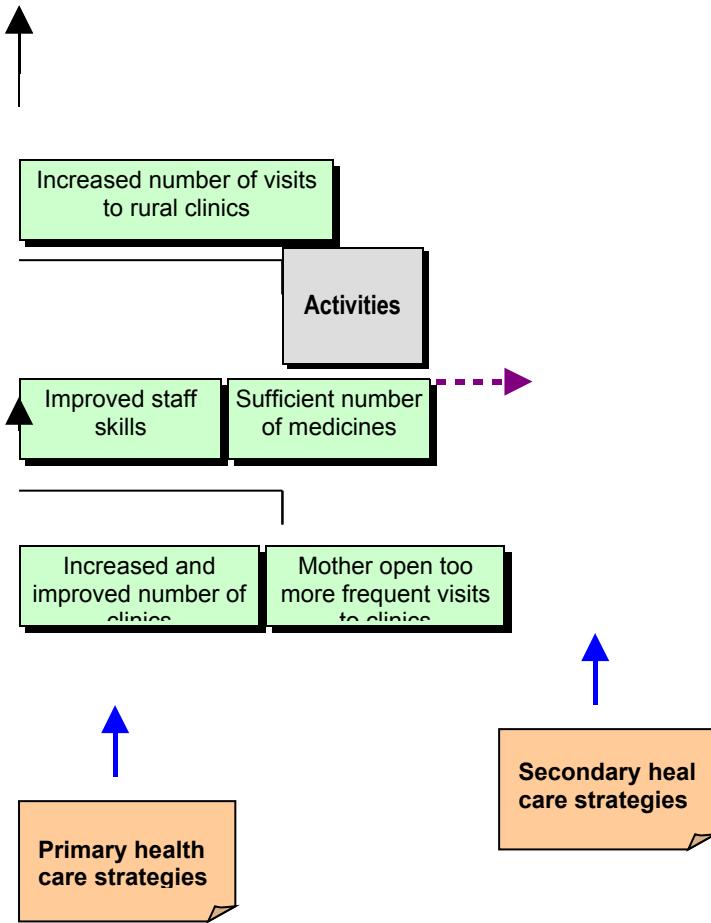
iii. The expected results are products/output, which can be physical or activities carried out; the combination of results obtained through the specific project objective should, in theory, be the beginning of sustained benefits enjoyed by the members of the target group.

iv. The activities are the actions that must be carried out to produce the results. They are the synthesis of what the project must accomplish.

From this description of intervention logic, it is clear that it is simply the carrying over of the objectives and identified strategies from the analysis phase (cf. par. 5.2.3. e 5.2.4.) to the first column of the Logframe matrix, as the following figure illustrates:

Figure 14: Links between the Problem Tree and the Logframe Matrix



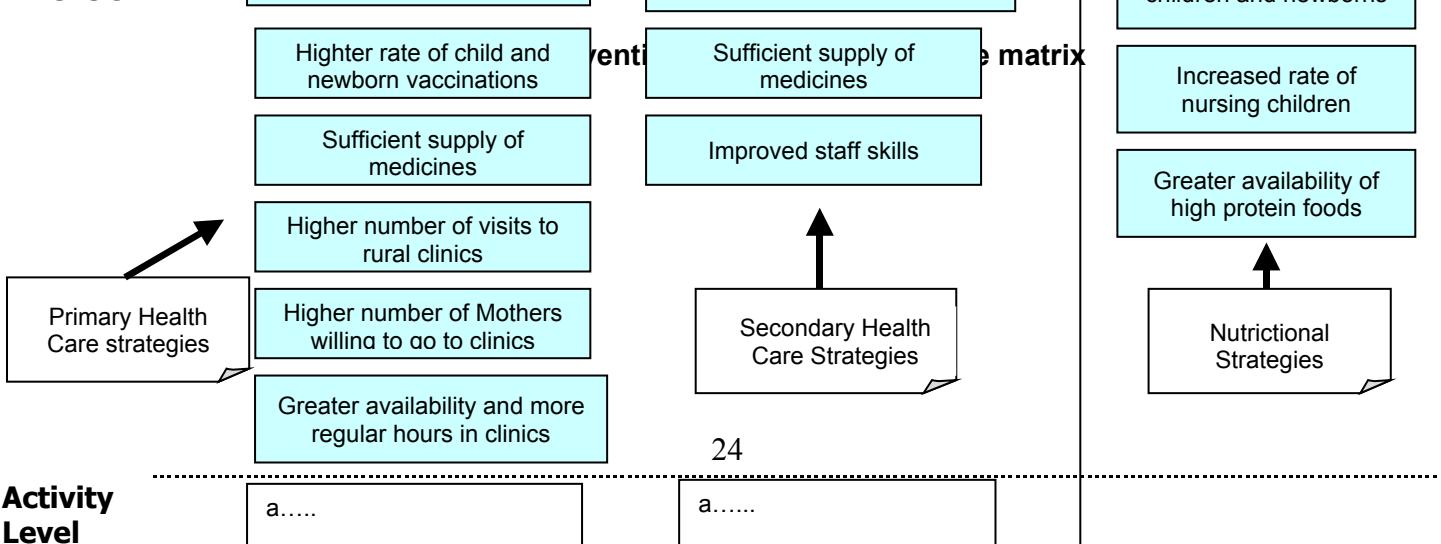


In the example shown in figure 14, two strategies were chosen so there are two specific objectives.

General Objective to have one specific objective per project, the formulation between means and ends should be recommended, incorporating at the same the results and

Specific Objective the intervention logic represent objectives outside the project control. They are thus external conditions to the project that must

Result Levels these conditions are the project results.



Source: Claudio M. Vitali, *Presentazione su “La progettazione degli interventi nel settore socio-sanitario”*, CEVAS, Gennaio 2005, p.23.

5.3.1.2. Second column: the Objectively Verifiable Indicators

Objectively Verifiable Indicators describe the project's objectives in operationally measurable terms (quantity, quality, time, etc). Specifying OVI^s helps to check the feasibility of objectives and helps form the basis of the project's monitoring and evaluation system. They are formulated in response to the question “How would we know whether or not what has been planned is actually happening or happened? How do we verify success?”

For each objective or result to measure, the OVI^s must contain the definition:

- ⇒ of the variable (the element to measure: WHAT?);
- ⇒ the recipients (those who will benefit from the project: WHO?);
- ⇒ the quantity (the present situation and the proposed situation: HOW MUCH?);
- ⇒ the time (the time period within which the objective should be reached: WHEN?);
- ⇒ the place (WHERE?).

A good OVI should also be SMART:

Specific to the objective it is supposed to measure;

Measurable (either quantitatively or qualitatively)

Available at an acceptable cost;

Relevant to the information needs of managers;

Time-bound – so we know when we can expect the objective/target to be achieved.

Specification of OVI^s verifies the fact that the objectives are operative and are a good basis for a monitoring system for the project. The OVI^s should be reliable measures and be cost effective. Much attention should be paid to making sure the OVI^s – which are the heart of the project – incorporate realistically the notion that there are ‘sustainable benefits for the target group’.

It is often necessary to establish more than one indicator for each objective statement. At the same time, the trap of including too many indicators should be avoided. The guiding principle should be to collect the minimum amount of information required to help project managers and evaluators determine whether objectives are being/have been achieved.

The OVI^s should be already defined during the indication and programming stage, but they often need to be specified better, in greater detail during the implementation stage; that is, as soon as there is additional information and the monitoring needs have been specified.

5.3.1.3. Third Column: Source of Verification

The source of verification (SOV) should be considered and specified at the same time as the formulation of OVIs. 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.

The SOV should specify:

- how the information should be collected (e.g. from administrative records, special studies, sample surveys, observation, etc) and/or the available documented source (e.g. progress reports, project accounts, official statistics, engineering completion certificates, etc.)
- who should collect/provide the information;
- when/how regularly it should be provided (e.g. monthly, quarterly, annually, etc.)

Sources of information external to the project should be checked for accessibility, reliability and relevance. At the same time, costs for labour and for collecting information should be studied so that the necessary means can be provided.

There is often a direct relationship between complexity of the evaluation (the difficulty of collecting data and analysing it) and its costs. If an OVI is too costly to verify, and too complicated to check, it should be replaced by a simpler one which is less costly, and often is indirect, a *proxy*.

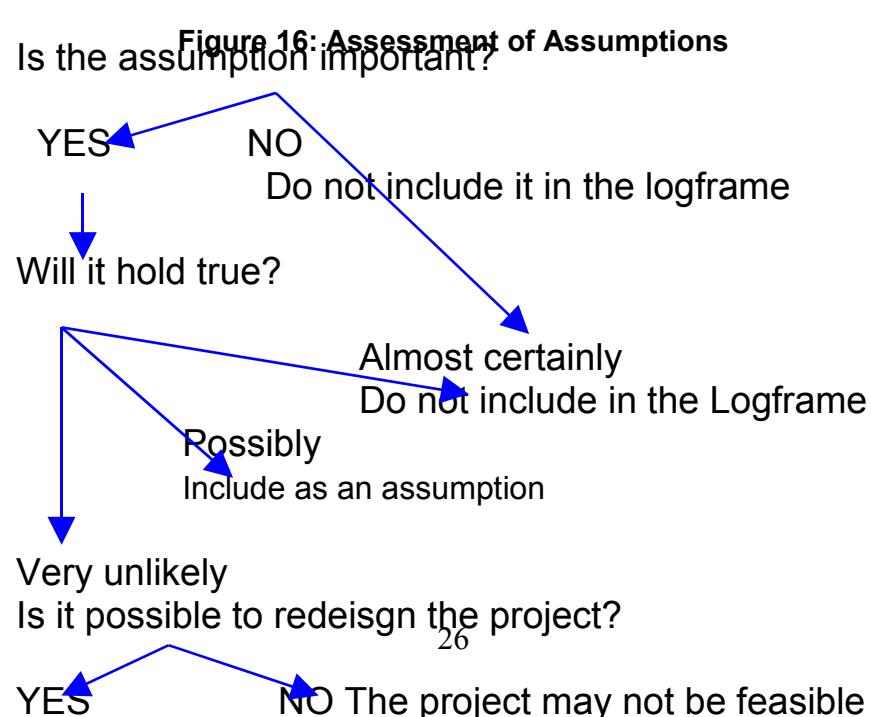
5.3.1.4. Fourth Column: Assumptions

The project alone cannot fulfil all of the objectives identified in the tree of objectives. In fact, once the strategies are chosen, there are other outside objectives which are not included in the intervention; they are external factors.

Even though they are outside the control of the project manager, external factors influence project implementation and its sustainability over time. These external factors (or conditions) must be present if the project is to be successful, and should be included as presuppositions or hypotheses in the fourth column of the Logframe matrix.

So, the hypotheses are external conditions which are not influenced by the project, but which determine the desired outcomes of the project, of the specific objective and the general objective.

The probability and significance of the external conditions to be kept in mind, should be valued as part of the process for estimating the risk level of the project. Some of these may be critical to the success of the project, and others of only marginal importance. A useful outline for evaluating the importance of assumptions can be seen in Figure 16 which follows:



Once the assumptions have been analysed and tested, and assuming the project is still considered ‘feasible’, the only assumptions that would 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 can become part of the project’s monitoring and risk management plan.

The relationship between the Logframe matrix described in the first column and the assumptions inserted in the fourth column is given by the vertical logic in the Logframe. This works as follows:

- once the Assumptions have been verified, the activities may begin;
- 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 filled, 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. This relationship is illustrated in Figure 17:

Figure 17: La Vertical logic of the matrix

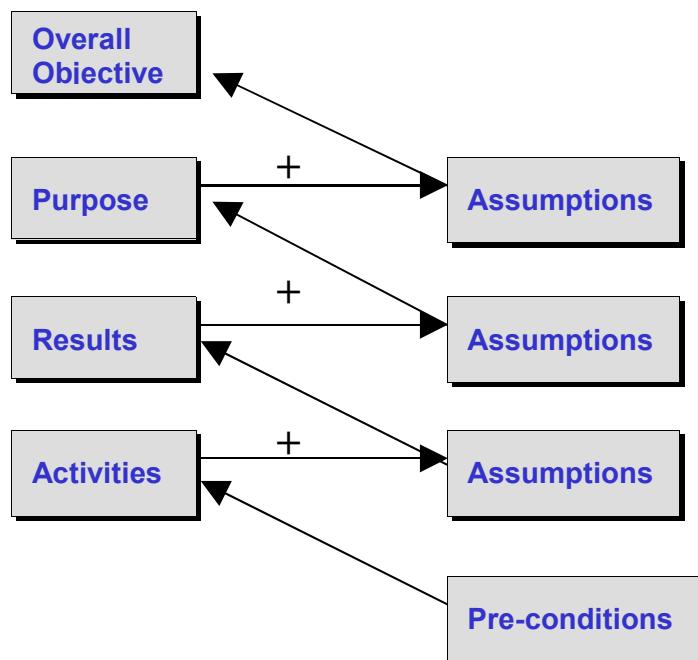


Figure 18: Example of completed Logframe matrix

Intervention Logic	Indicators	Evaluation source	Assumptions
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Overall Objective	Reduced mortality rates for children and mothers	Mortality rated reduced by x-y before the year 200... for children below 1 year and 5 years as well as pregnant women and mothers who are nursing children.....	Statistics of the Health Ministry which will be analyzed both before and after the project execution	
Purpose	Improved health of pregnant mothers, of those nursing babies, of the children themselves, and of the newborns	Reduced incidents of post partum and newborn infections within health centres will be reduced by x-y before the year 200..	Hospital and clinic data will be analyzed both before and after the project execution	
Results	1. Functioning Primary Health Care services at the district level 1.1. Quick diagnosis of birth complications 1.2 Higher rate of child and newborn vaccinations 1.4 Higher number of visits to rural clinics 2. Improved Secondary Health Care services 2.1 Improved hygiene and patient care standards by staff 2.2. Sufficient supply of medicines 2.3. Improved staff skills	An increase in the number of villages with regular Health Care Services by x-y before the year 200_ An increase in the number of children vaccinated against polio by x-y before the year 200..	Data from the Health Ministry Data for vaccinations at clinics will be analyzed every 3 months...	Improved home nutrition due to the greater availability of high protein foods and to the fact that more mothers breastfeed their infants and babies
Activities	1. Recover or renew equipment and ambulances 2. Carry out a programme for mobile hospitals 3. Recruit and train personnel who can assist in the birth process..... 	Means Personnel Equipment Buildings	Costs ... € ... € ... € ... €	The Health Ministers maintains real financing at the same levels as those before the project began.

Source: Claudio M. Vitali, *Presentazione su "La progettazione degli interventi nel settore socio-sanitario"*, CEVAS, Gennaio 2005, p.28.

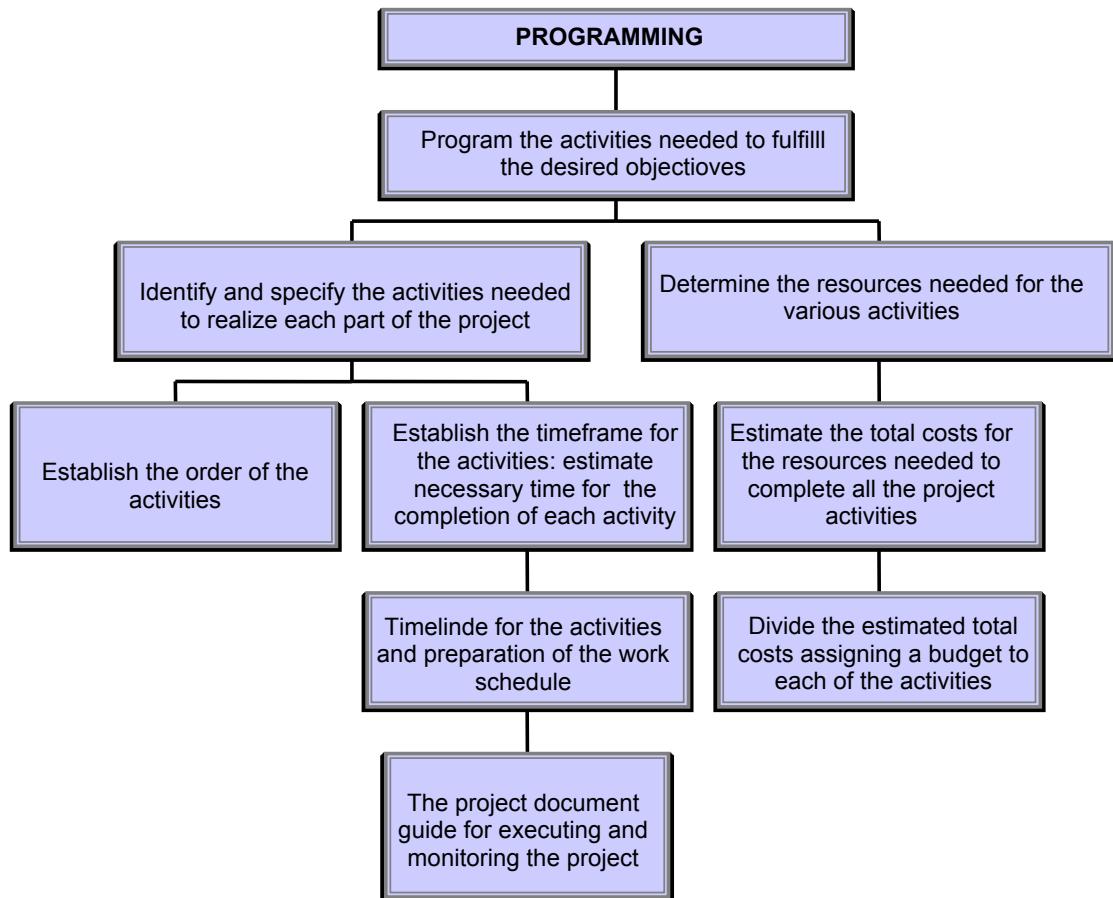
5.3.2. Activity, resource and cost schedules

A Project Logframe describes usually in very general terms, which activities should be carried out. Once the matrix is completed, usually during the programming stage, further programming takes place so as to add the new operational details to the Project Realization Plan. As figure 16 (which follows) shows, it will first of all be necessary to identify and list the activities which will help fulfil the various parts of the project, establish the sequence of these activities and their timeframe. Then it will be necessary to provide cost estimates for each of the activities, thus constructing the budget for each activity and of the project as a whole.

These activity and resource specifications must be done during the feasibility study stage, which is part of the project formulation stage. Detailed information on the impact of net recurring costs could bring about a reformulation of the location and extent of the project.

Following this, during the first months of realizing the project, a general schedule of activities (the Implementation Schedule) is drawn up and the detailed programmes of activities and resources is updated accordingly.

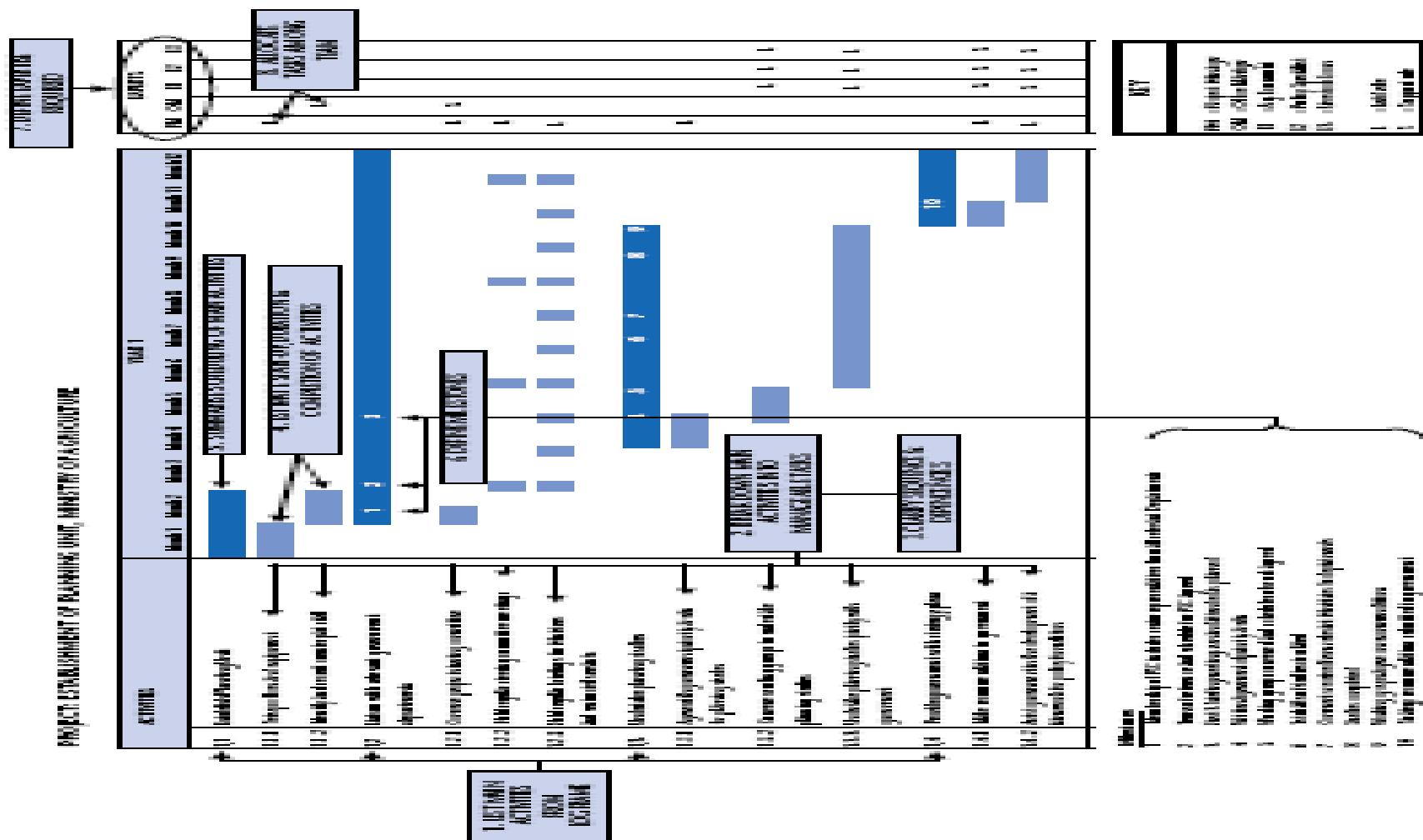
Figure 19: The Operational Plan



Scheduling activities is a way of representing the various project activities, identifying their logical and temporal sequence as well as all the interdependencies that exists between them; this provides the basis for assigning managerial responsibilities for completing each of the activities.

All of the information in an Activities Schedule can be synthesized in a graphics format called a *Gantt Diagram*. An example is given in the following figure:

Figure 20: Gantt Diagram



Source: Project Cycle Management Guidelines, Volume 1, European Commission - EuropeAid Cooperation Office, 2004, p. 89.

Once the Activities have been entered into the schedule, the resources necessary to undertake the Activities must be specified.

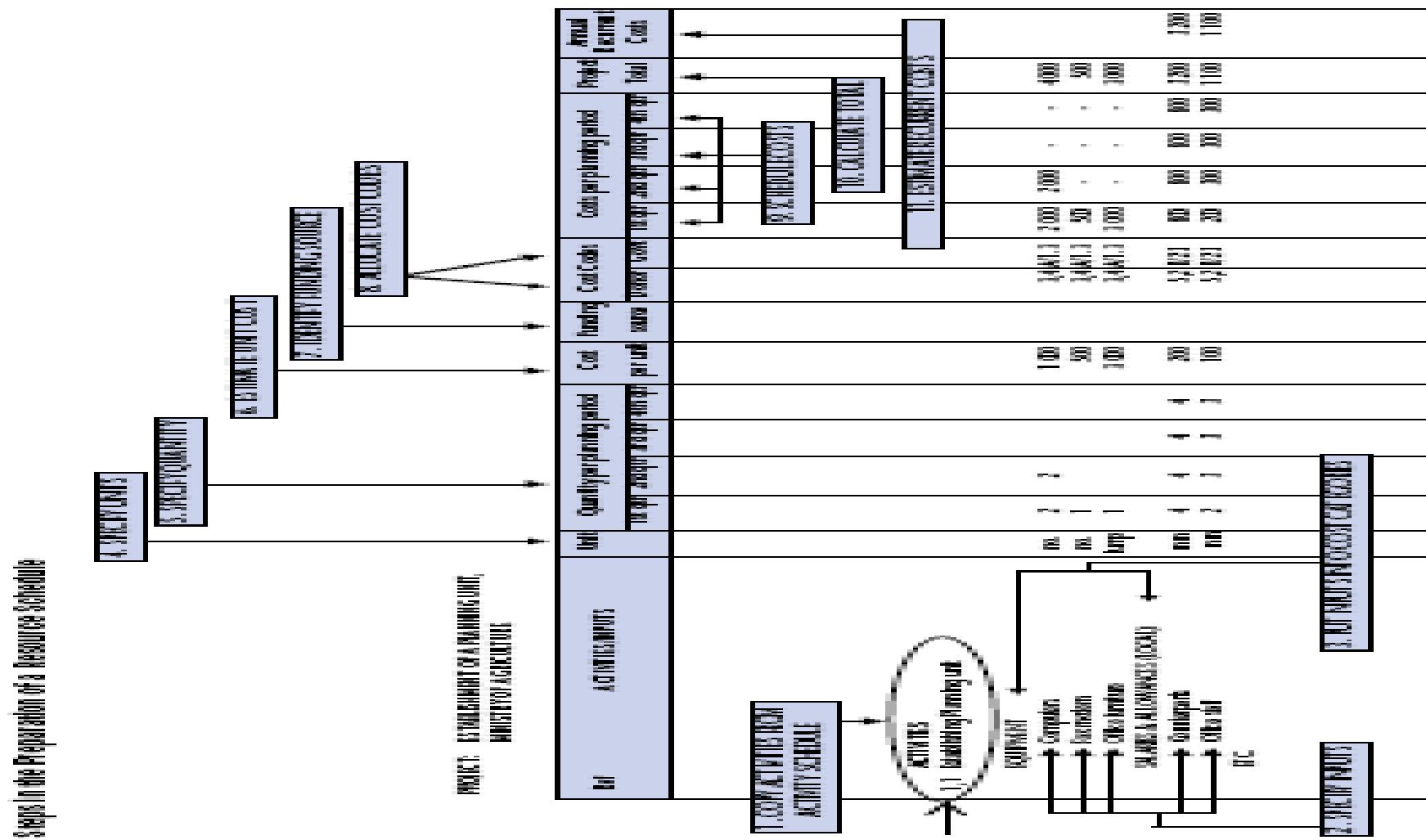
As there will be a need to aggregate or summarise the cost information, the resources should be allocated to agreed cost categories. This will have a significant influence on the decisions for investment during the project evaluation and, later on, if financing becomes available, also on an easy implantation process.

Once all of the costs for the single activities have been grouped in the overall budget, it is important to remember that the implementing agency will be required to meet any recurrent costs of maintaining service provision beyond the life of the project. Recurrent costs may be covered (fully or partly) through increased revenue that has been generated through project Activities. Whether or not this is the case, it is important that the net recurrent cost implications of the project are clearly specified so that the future impact on the implementing agency's budget may be determined.

Finally, the project costs determination should permit the allocation of costs to the different sources of financing so that each one has a clear idea of the competence of his/her contribution.

The following figure shows an outline for representing the resources needed for each activity.

Figure 21: Resource and Cost Programming



Source: Project Cycle Management Guidelines, Volume 1, European Commission - EuropeAid Cooperation Office, 2004, p. 91.

5.4. USING THE LOGICAL FRAMEWORK APPROACH DURING THE STAGES OF THE PROJECT CYCLE

The Logical Framework Approach LFA is the principle tool in the PCM system, and is ultimately applied to all the phases of the project cycle:

- in the Identification stage:
 - ⇒ supports the analysis of the existing situation;
 - ⇒ identifies potential objectives and strategies;
 - ⇒ analyzes the relevance and feasibility of the project idea;
- in the Formulation stage:
 - ⇒ analyzes the relevance and feasibility of the project;
 - ⇒ helps in the preparation of the work plan with clear objectives, measurable results, management strategies for risks, and definition of the manager responsibilities;
 - ⇒ offers information for analyzing the cost-benefits relationship;
- in the Implementation stage:
 - ⇒ supports the contracts phase;
 - ⇒ supports the preparation of the operational plan, monitoring, risk management, progress reports (all that is projected);
- in the Evaluation and Audit stage:
 - ⇒ provides a vision of what has been programmed so as to evaluate the performance and impact of the project.

5.5. INTERLOCKING LOGICAL MATRIX FORMATS

Complex interventions, made up of several components or projects, are normally called “Programmes”. These can be sector-based programmes, national level programmes, or regional programmes with several sectors interested in them.

The principles for the Logical Framework Approach are equally applied to this type of intervention; appropriate planning requires using the same stages of analysis and planning (cf. par. 5.2. e 5.3.).

At the beginning, each logical framework can be subdivided into smaller matrixes. Each of these will describe components in the “master” Logframe matrix, but in greater detail.

Policy	Programme	Projects
Overall objective		
Purpose	Overall objective	
Result	Purpose	Overall objective
	Result	Purpose
		Results

EXERCISES

1. What are the different types of help offered by the European Commission?

2. What are the weaknesses of the project approach?

3. Describe the phases of the project cycle.

4. What is the difference between control and evaluation?

5. What relationship exists between the Project Cycle Management and the Logical Framework Approach?

6. Describe the four phases in the analysis of the LFA.

7. What is the difference between LFA and LFM?

8. Describe the characteristics of an objectively verifiable indicator.

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The European Commission Development Cooperation Policy guidelines can be found at:

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

Web Sites to visit:

<http://ec.europa.eu>

www.cooperazioneallosviluppo.esteri.it

www.solint.it