



Report from the Regional Seminar

“Use of Logical Framework Approach – an important tool for successful international co-operation in the fields of education and training”

Belgrade, 7-8 May 2007

Venue: Hotel „Majestic”, Belgrade

Background and Justification

As part of the ERI SEE capacity building measures for participation in the Community programmes in education and training targeting the network of experts that was established with the ERI SEE workshops and study visits organised in 2005 and 2006, the Seminar took place in Belgrade, Republic of Serbia, on 7-8 May 2007. It was continuation of the training on Project Cycle Management (PCM) and focused on understanding and assessment of the external impacts on the project, as well as on the indicators of progress relevant for monitoring of project implementation and achievements.

The seminar was also the opportunity for dissemination of relevant information gained during the study visits to the national authorities and the national agencies responsible for the Community programmes in education and training in Slovenia and Norway, as well as for presentation of the experience of Slovakia in establishing the structure and conditions for the management of EU programmes in education and training.

Organisers of the Seminar

The seminar was jointly organised by the ERI SEE Agency, the the Ministry of Education and Sport of the Republic of Serbia, the EU expert in education and training Ton Farla from The Netherlands, and the experts: Laura Popa from Romania, as well as Viera Farkashova and Jana Lenghardtova from Slovakia.

Written contributions for the seminar (booklet, Power Point presentations and a case study) provided the EU expert in education and training Mr. Ton Farla, Laura Popa, Viera Farkashova, Jana Lenghardtova and Aspasija Hadzisce. The documents are available on the ERI SEE web site.

Participants to the Seminar

22 participants from Bosnia and Herzegovina, Croatia, UNMIK/PSIG Kosovo, Moldavia, Montenegro and Serbia, and experts-trainers from The Netherlands (key expert, trainer and moderator of the event), Slovakia and Romania took part to the Seminar.

Topics addressed during the Seminar:

Study visits to Slovenia and Norway:

- Role of the national authorities in establishing conditions for smooth implementation of the Community programmes in education and training;
- Organisation and functioning of the national agencies responsible for implementation of the Community programmes in education and training;
- Visits to on-going projects and institutional structures that support smooth implementation of projects.

Slovakia - experience in the establishing the structure and conditions for the management of EU programmes in education and Training:

- Overview of the history ;
- Slovak Academic Association for International Cooperation (SAAIC): objectives, structure, operation, international programmes managed by SAAIC, other initiatives and projects, SWOT analysis.

The Logical Framework

Revisiting the Logical Framework

Building on the knowledge and skills gained in the seminar Sofia, 30 September-1 October 2005 on Project Cycle management (Introduction, objective setting, problem and stakeholder analysis)

The expert Ton Farla prepared a booklet on Logical Framework Approach. It was distributed to the participants to the Seminar. The expert permitted publishing of the booklet on the ERI SEE web site and suggested translation to the national languages of the countries of the ERI SEE region.

The training sessions covered:

- *Stakeholder analysis* (identification of groups, people and institutions which are likely to be affected by the project, identification of the key problems, constraints and opportunities they face);
- *Problem analysis* (formulation of the problems, determination of the cause and effect relationships and development of a problem tree);
- *Objective analysis* (development of the objectives from the identified problems; identification of the means to end relationships, identification of clusters of objectives and determination of the project strategy);
- *Intervention logic* (definition of project elements, test of the internal logic, and formulation of the objectives in measurable terms);

- *Assumptions and Risks* (identification of the conditions which are likely to affect the project's implementation but which are outside the project management control);
- *Indicators* (identification of ways to measure that progress has been achieved, formulation of indicators, definition of means of measurement).

Methods of work:

- *Lectures* combined with practical work on one Socrates and one Leonardo da Vinci case study. Active involvement of the trainees in the working exercises and in the discussions for the topics covered with different sessions of the seminar.
- *Presentations*: transfer of the experience from the study visits, the Slovakian experience and presentation of case studies in framework of the PCM training.
- *Group work* and presentation of the results of the work.

Outcomes of the Seminar and recommendations for future activities:

- Dissemination of information from the study visits to Slovenia and Norway and presentation of the Slovakian experience in establishing the structure and conditions for the management of EU programmes in education and training;
- Knowledge acquired and capacity developed for proper use of Logical Framework Approach in project design in a way that will enable efficient monitoring of the project implementation and measuring the achieved outcomes and outputs;
- Collection of the solutions prepared by the working groups during the Seminar;
- Recommendation for future regional cooperation: all participants to the Seminar recommended a follow-up Seminar on the Logical Framework Approach to be organised in order to finalise the training by covering the two remaining steps of the Logical Framework Approach: *activity schedule* (determination of the sequence and dependency of activities; estimation of the duration; setting milestones and assigning responsibilities) and *cost schedule* (specification of the inputs required; development of the cost schedule; preparation of detailed budget).

The evaluation form of the Thematic Seminar is provided in Annex 3 of this Report.



Regional Seminar

“Use of Logical Framework Approach

**an important tool for successful international co-operation in the
fields of education and training”**

7-8 May 2007, Belgrade, Republic of Serbia

Venue: Hotel “Mažestik“, Obilićev Venac 28, Beograd

Facilitator: Ton Farla

REVISITING THE LOGICAL FRAMEWORK (LFW)

1. General introduction

In Community programmes such as Socrates and Leonardo, activities are to a great extent organised in projects and therefore project management is a key discipline within Programme Management Units of Ministries and LLL Coordinating Agencies. It is important that the staffs working with these programmes do not just know the project procedures in a mechanical way but also understand the management techniques required for effective management of projects, the purpose of documents and interactions between project management techniques and Community programme documentation.

The approach, adopted by the European Commission to address project design and management is called Project Cycle Management, and is based upon the Logical Framework Approach³. The Logical Framework Approach (LFA) is an analytical and management tool which is now used (in one form or the other) by most multi and bi lateral Aid agencies, international NGO's and many partner governments. Project cycle management is a complex and creative process - involving the negotiation of decisions acceptable to key stakeholder groups. Teamwork, negotiation and communication skills are thus central to effective PCM as well as appreciation of the political context within which decisions are being made.

This seminar builds on the knowledge and skills gained in the previous seminar Sofia, 30 September - 1 October 2005 on Project Cycle management (Introduction, objective setting, problem and stakeholder analysis). To refresh the knowledge and skills of the delegates, the training will revisit the Logical Framework (LFW) as a dynamic tool or a set of instruments that enables the delegate to effectively structure the planning and implementation of projects. The training focus is in particular on the understanding and assessment of the external impacts on the project and, as well as on the indicators of progress relevant for monitoring of project implementation and achievements.

This training attempts to impart an understanding and use of:

- The key LFW elements and relevance of the LFW approach to projects in general and its consequences for the development and evaluation phase
- Concepts of goal, purpose, results and activities of a project being able to conceive of appropriate indicators/inputs at the respective levels
- The testing of assumptions and risks, and smart indicators of progress and means of verification relevant for the monitoring of project implementation and achievements.

The LFW will be practised through means of a Socrates and Leonardo case carried out in the ERI-SEE countries. This forms the basis for the preparation of the different elements of the LFW by the participants. In line with the previous regional seminars, the focus of this seminar will be on the assumptions and risks and verifiable indicators

Expected outcomes

- The experts are having an understanding of the principle of the LFW as an analytical and management tool for establishing the institutional framework necessary to support participation into the LLL programme
- The experts are able to apply the skills needed to design and evaluate projects supporting participation to LLL programme having in mind the phases of the LFW.

The Logical Frame work approach (LFA)

Strength and weaknesses of the LFA

The LFA provides no magic solutions, but when understood and intelligently applied, is a very-effective analytical and management tool

The strength:

- By bringing stakeholders together to discuss problems, objectives and strategies, the LFA encourages people to consider what their own expectations are and how they might be achieved.
- By stating objectives clearly and setting them out in a “hierarchy of objectives” the log frame matrix then provides a mean of checking the internal logic of the project plan and ensures that activities, outcomes and objectives are linked.
- It forces planners to identify critical assumptions and risks which may affect project success, thus encouraging a discussion about project feasibility.
- In stating indicators of achievements and measuring progress, planners are made to think about how they will monitor and evaluate the project right from the start.

All this information is brought together in one document – the log frame and functions as a tool for communication between different stakeholders.

The weakness

- Even the LFA has proven to be a powerful planning and management tool; it is not a comprehensive tool for either planning or management and does not guarantee project success.
- It is time consuming and requires a thorough understanding of the logic and concept of LFA. It is not just filling in the boxes
- Some problems can be compounded by rigid application of the Log frame not taken into account the changing environment. The Log frame should be regularly reviewed and revised to reflect changes.
- The LFA should be supported by technical, economic, social and environmental analysis, and stakeholders should be involved as much as possible to ensure that the log frame reflects real priorities.

LFA as a tool

It is important to keep in mind that the LFA is a tool to promote stakeholders participation, dialogue, and agreement on project scope rather than to impose external concepts and priorities.

In other words, the importance lies in the process as much as the matrix product.

The logical framework approach to project design

Drawing up a LFW has two main stages (1) Analysis and (2) Planning, which are carried out progressively during the Identification and Formulation phases of the project cycle

1. The analysis stage should be carried out as an iterative (repeating) learning process rather than a set of linear steps. (Reviewing and refining as new information comes to light).
2. In the planning stage the results of the analysis are transcribed into a practical, operational plan ready to be implemented.

The two main phases of LFA

Analytical Phase	Planning phase
<ul style="list-style-type: none"> ▪ Step 1: Stakeholder analysis -identify groups, people and institutions which are likely to be affected by the project, and identify the key problems, constraints and opportunities they face ▪ Step 2: Problem analysis -formulate problems; determine cause and effect relationships and develop a problem tree ▪ Step 3: Objective Analysis Objectives - develop objectives from the identified problems; identify means to end relationships; identify clusters of objectives and determine the project strategy <p><i>Having analyzed the situation, the project should now be ready for detailed planning</i></p>	<ul style="list-style-type: none"> ▪ Step 4: Intervention logic – define the project elements, test its internal logic, and formulate objectives in measurable terms ▪ Step 5: Assumptions and Risks -identify the conditions which are likely to affect the project's implementation but which are outside the project management control ▪ Step 6: Indicators – identify ways to measure that progress has been achieved; formulate indicators; define means of measurement ▪ Step 7: Activity schedule -determine the sequence and dependency of activities; estimate duration, set milestones and assign responsibilities ▪ Step 8: Cost schedule – specify inputs required; develop cost schedule; prepare detailed budget

The analysis stage

Preparatory analysis

Prior to initiating detailed analytical work with Stakeholders groups (field work), it is important that those involved in the identification or formulation of projects are sufficiently aware of the policy, sector and institutional context within which they are undertaking their work. Key documents that should be referenced would include the EC's Country Papers and relevant Partner Government development policy documents.

The scope and depth of this preliminary analysis will primarily depend on how much information is 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 work to ensure that the development of the idea takes account of these elements of the operating environment.

Step 1 - stakeholder analysis

Individuals, groups of people, institutions or others that may have a significant interest in the success or failures of a project (either as implementers, 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 problem identification, objective setting and strategy selection.

To determine who are the stakeholders the following questions may help you:

- Whose views and experience would be relevant?
- Who will be taken decisions about the project?
- Who will be expected to act on these decisions?
- Whose active support is essential to the success of the project?
- Who has a right to be involved?
- Who is likely to feel threatened by the project?

Once the key stakeholders are being identified, they should be consulted to determine what problems they face. This will involve the collection of information, about the current situation, perhaps through a survey, a series of meetings or another form of assessment.

Once the information has been collected and processed, it's time to bring the stakeholders together in a workshop to further develop the problem identification and to begin the process of design.

The purpose of stakeholder analysis is to identify key stakeholders, assess their interest or "stake" in the project and the ways in which these interests affect the viability and risks of the project.

The main steps involved in stakeholder analysis are:

- 1) Identify the general development problem or opportunity being addressed
- 2) Identify all those groups who have a significant interest in the project;
- 3) Investigate their respective roles, different interests, relative power and capacity to participate (strengths and weaknesses);
- 4) Identify the extent of cooperation or conflict in the relationships between stakeholders; and
- 5) Interpret the findings of the analysis and incorporate relevant information into project design to help ensure that
 - (i) resources are appropriately targeted to meet distributional/equity objectives and the needs of priority groups,
 - (ii) management and coordination arrangements are appropriate to promote stakeholder ownership and participation;
 - (iii) conflicts of stakeholder interest are recognized and explicitly addressed in project design.

A note on terminology

There are a variety of key words used to differentiate between different types of stakeholder. A summary of the terminology used in the EC context 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 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')

Tools for conducting stakeholder analysis

There are a variety of tools that can be used to support stakeholder analysis. Within the context of this training, two suggested options are described below, namely:

- 1) **Stakeholder analysis matrix**
- 2) **SWOT analysis**

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.

1) Stakeholder analysis matrix

An example of a stakeholder analysis matrix format is shown in Figure 6 below.

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

Example of a stakeholder analysis

Establishing an industrial training centre				
Stakeholder Group	Tasks and responsibilities	Expectation for the project	Fear for the project	Potential support for the project
Directorate for VET (Ministry of Education)	Personnel selection Budgets Definition of forms Design of the national VET system,	Improvement of the equipment Improvement of coordination Training of staff New ideas	Change of the socio-political framework Priorities set by the donor organisation	Supply of project personnel Political support of the project Multiplier for project impacts
Industrial Training Centre (ITC)	Implementation Selection of personnel Training of specialists	Implementation of modern training programmes Improvement of quality of education Training of staff	Insufficient staff experience for implementation of project Insufficient own financial resources for long term sustainability	Personnel highly motivated Provision of venue Link to other stakeholders groups
Employers	Provision of jobs Setting the framework conditions for employees Provision of social security Development of technologies	Supply of highly qualified personnel Improvement of productivity Improvement of product quality Improvement of work-flow organisation	Competition through "subsidised" production in training centres Low quality of training High costs for training partly to be covered by the companies	Provision of jobs Provision of internships Collaboration in the design of the training Collaboration in the final exams
Youth	General education Social responsibility	Enhancement of skills employment	Lack of sufficient jobs, lack of financial resources for training fees	Application of the new skills

SWOT analysis - Institutional Appraisal

A major factor for the success of a project is the performance and capacity of the participating institutions. In order to analyse the stake each participating institution has in the project, an institutional appraisal may be undertaken. SWOT analysis is a tool for institutional appraisal, and analyses the organisation under each of the four headings:

- **Strengths** ~ the positive internal attributes of the organisation
- **Weaknesses** - the negative internal attributes of the organisation
- **Opportunities** - external factors which could improve the organisation's prospects
- **Threats** - external factors which could undermine the organisation's prospects

2) A SWOT analysis

A SWOT analysis is undertaken as a brainstorming exercise in which representatives of the organisation participate fully. As with any brainstorming, one person should act as moderator, to explain the exercise, take suggestions from the group, write them down and summarise the findings. The results are best displayed on a whiteboard or flipchart divided into a grid of four squares, to represent the S-W-O-T headings. The group should not be too large for discussion, and the members should be given time to think through their own contributions, either individually or in small; groups of two or three people. If there is a good reason to consult widely throughout the organisation, it may be appropriate to conduct more than one SWOT, with groups representing different stakeholders.

An example of a SWOT analysis for a vocational training centre:

STRENGTH <ul style="list-style-type: none">▪ Motivated personnel▪ Good contacts to private industry	WEAKNESS <ul style="list-style-type: none">▪ Outdated technology▪ Curricula not appropriate to modern needs▪ No budget for change
OPPORTUNITIES <ul style="list-style-type: none">▪ High demand for training of new skills▪ No competition in the VET sector	THREATS <ul style="list-style-type: none">▪ Deteriorating economic situation lowers the need for trained personnel▪ Government structures do not support change

Step 2 - problem analyses

In aiming at a desired future situation (the objective), there is an implicit recognition of an undesirable situation in the present- or to put it more simply, there is a problem. The first step in setting objectives is therefore to clarify what the problem is.

This is called problem analysis and involves two tasks:

- 1) Identification of the major problems faced by beneficiaries and
- 2) Development of a problem tree to establish causes and effects

Problem analysis is an important part of the stakeholder workshop. It involves analysis of the problems already identified, from the perspectives of the various groups of stakeholders involved. In this way a balanced analysis is achieved which takes account of differing, and sometimes conflicting points of view. The aim is to establish an overview of the situation by linking the problems together in a problem tree. During problem analysis, the task is to identify the causal relationships between the various problems through the development of a problem tree. A problem tree is simply the problems set out in a hierarchical order.

From the previously formulated problems, each participant writes down a suggestion for a focal problem - i.e. the problem that they consider being the central point of the overall problem situation. Each stakeholder will be guided in his or her initial choice of focal problem by his or her own interest tie project, and the problems they are experiencing. The range of focal problems suggested should be discussed until the participants can agree on one focal problem. This is the starting point for the problem tree.

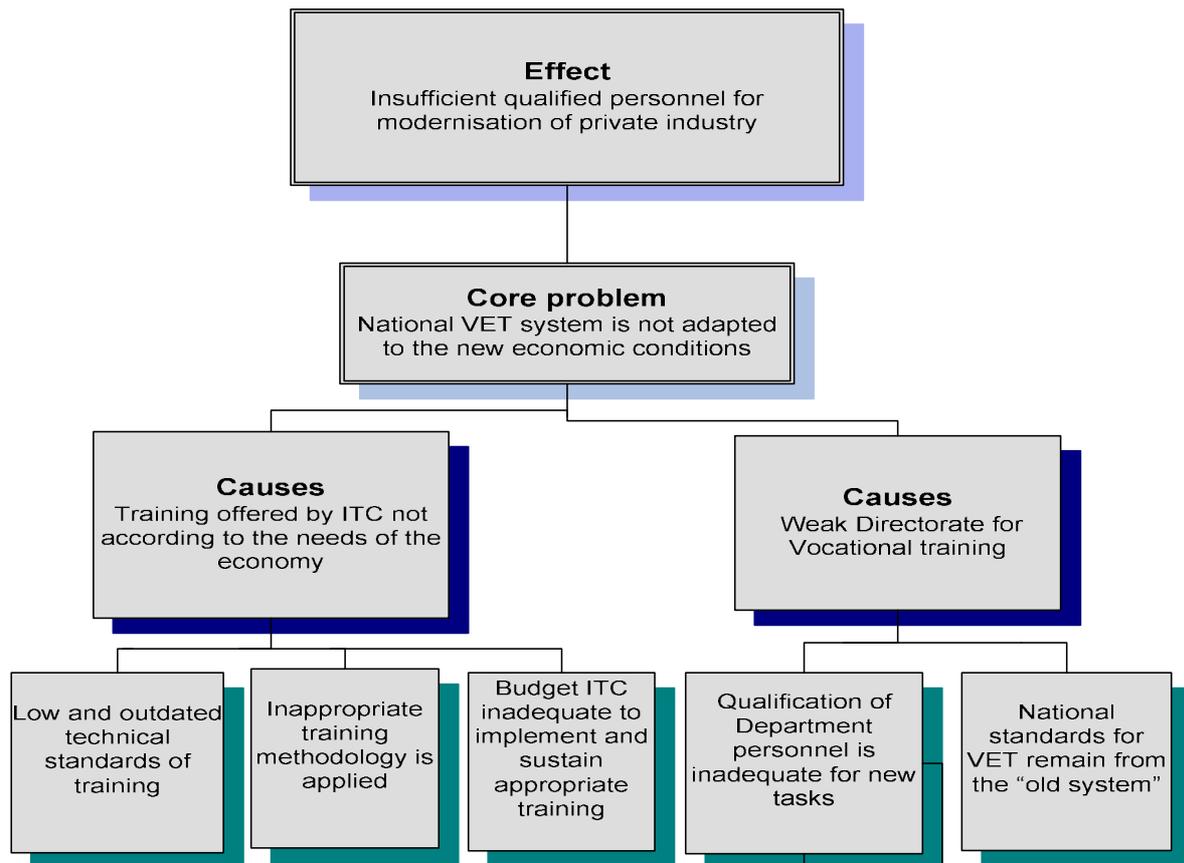
The focal problem is pasted onto a wall, and a second problem related to it. Then:

- if the problem is a cause it goes on the level below '
- Is it is an effect it goes above '
- it is neither a cause nor an effect it goes on the same level

As the tree develops, the remaining problems are attached to it in the same way. A review of the problem analysis may lead to the emergence of a different focal problem at a later stage, but this does not affect the validity of the analysis.

For example: if the focal problem is "National VET system is not adapted to the new economic conditions" a cause might be that the training offered does not correspond to the needs of the economy, while an effect might be insufficient qualified personnel for modernisation of private industry available

Figure – An example of a problem tree



Step 3 - analysis of objectives

While problem analysis presents the negative aspects of the existing situation, analysis of objectives presents the positive aspects of a desired future situation. This involves the reformulation of problems into objectives – the objective tree can therefore be conceptualised as the positive mirror image of the problem tree.

Transforming problems into objectives

Problem	Objective
Insufficient qualified personnel for modernisation of industry available	Sufficient qualified personnel provided to private industry
National VET system is not appropriate to the new economic conditions	National VET system is appropriate to the new economic conditions
Training offered by ITC not according to the needs of the economy	The ITC offers training according to the needs of the economy

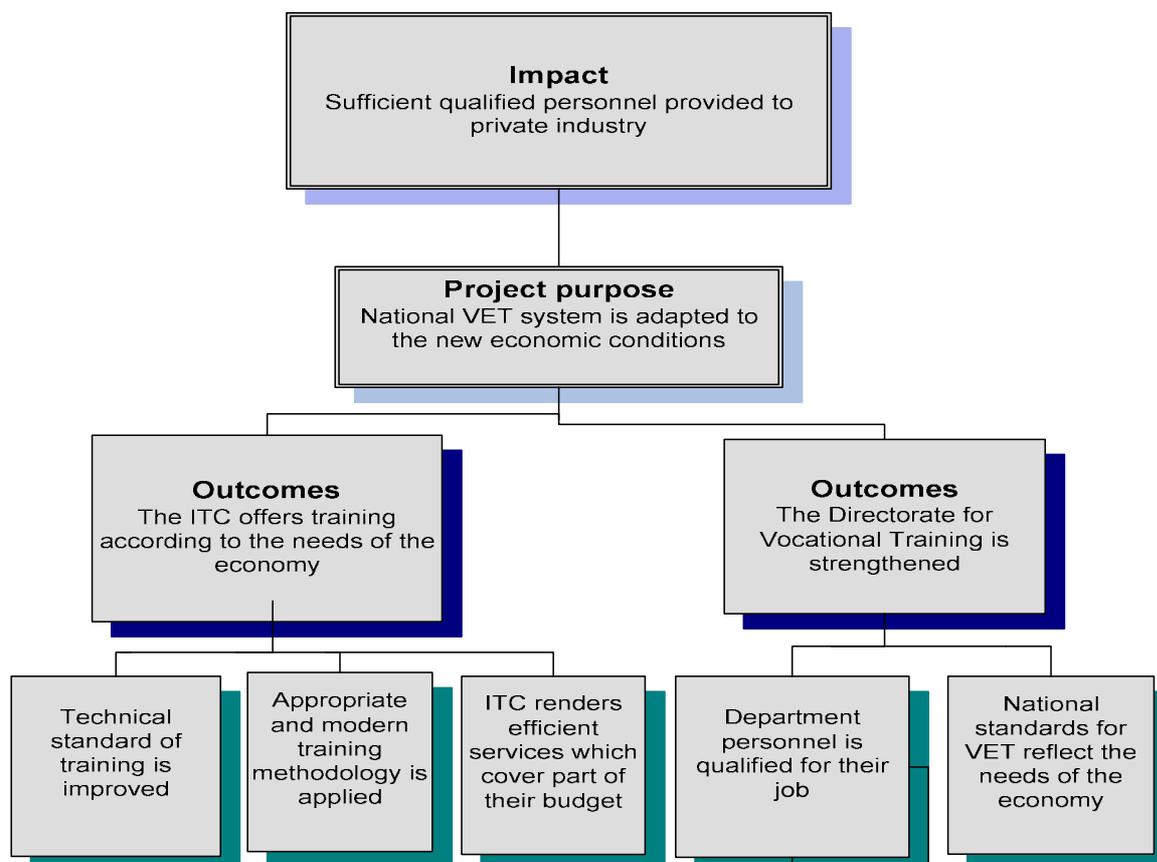
The focal problem is reformulated as the specific objective, and the 'cause and effect' relationships become 'means to end' relationships. However, it may be found that there are gaps in the logic of the initial objective tree, or that the objectives should in fact be at a different level in the hierarchy. Therefore linkages between objectives should be reviewed and reorganised as necessary. Objectives dealing with a similar topic are grouped together in clusters to identify definable areas of management responsibility. At this stage, statements of objectives will still be fairly broad. It is only when the scope of the project is decided, and preparation of the detailed plan begins, that these statements will be reviewed and clarified.

Stating Objectives

Project objectives will already have been specified during the analysis of objectives. Now that they have been transposed in to the logframe, they should be reviewed to ensure that they are clearly stated and understood by all parties. Objectives should also have certain characteristics. They should be:

- **Realistic** - achievable within the given financial and physical resources, and the time-frame envisaged
- **Specific** - so that any progress towards the objective can be attributed to the project and not to some other cause
- **Measurable** - at acceptable cost and with acceptable effort, so that the project's performance can be measured

Figure 10 – An example of an Objective tree



Step 4 – Defining the intervention logic

Defining the intervention logic is the first stage in preparation of the log frame, and it is worth providing an introduction of the whole log frame before going further. The log frame is the visual output of the LFA. However, the log frame for all its advantages when clearly understood and professionally applied provides no magic solution to identifying or designing good projects. It is merely an analytical, design and presentational tool. The principle of 'garbage in, garbage out' can apply to the log frame if it is used mechanistically. When used properly, the log frame helps to make the logical relationships between activities, outcomes, specific objectives and overall objective(s) more transparent, at least to the informed user. The log frame should thus not be seen as simply a set of mechanistic procedures, but as an aid to thinking;

"The method consists of an analytical process and a way of presenting the results of this process, which makes it possible to set out systematically and logically the project's objectives and the causal relationships between them"⁵

Another important point is that the log frame must be seen as a dynamic tool, which should be reassessed and revised as the project itself develops and circumstances change. It should be used to provide structure and purpose to project planning and budgeting without being perceived as an inflexible and constraining blueprint.

The Structure of the Log frame

The Log frame itself consists of a matrix, which has four columns and four rows where all the key parts of a project can be inserted as a clear set of statements: the project goal, purpose, outputs and activities, with their indicators, evidence and assumptions. It shows the project's structure and describes the project logically. .

The **vertical** logic identifies what the project intends to do, clarifies the causal relationships and specifies the important assumptions and uncertainties beyond the project manager's control. The **horizontal** logic relates to the measurement of the effects of, and resources used by, the project through the specification of key indicators for performance measurement, and the means by which the measurement will be verified.

The conceptual model

	NARRATIVE	INDICATORS	MEASUREMENT	ASSUMPTIONS
GOAL				
PURPOSE				
OUTPUT				
ACTIVITY				

The key to completing a log frame is to fill in the hierarchy of objectives by working down the Summary column, then work upwards through the Assumptions column and then work across each row to identify the Indicators and Evidence for each objective.

The log frame does not show every detail of the project. It is an overview of the key factors. Details can be given in other documents, such as the proposal, budget and activity schedule, which accompany the log frame.

The column headings of the log frame are defined as follows:

- *Narrative* - the narrative description of the project's intervention logic at each of the four levels of overall objectives, specific objectives, outcomes and activities.
- *Indicators* - measurable indicators at each level of the log frame narrative.
- *Measurement* - the means by which the indicators will be recorded.
- *Assumptions* / risks which could affect the progress or success of the project.

The log frame asks a series of further questions:

- Where do we want to be? (**GOAL, PURPOSE**)
- How will we get there? (**OUTPUTS, ACTIVITIES**)
- How will we know when we have got there? (**INDICATORS**)
- What will show us we have got there? (**EVIDENCE**)
- What are the potential problems along the way? (**ASSUMPTIONS**)

Typical structure of the Log frame Matrix

Project description	Indicators	Measurement	Assumptions
Overall Objectives - Project's contribution to programme objectives	Measures of achievement including Quantity, Quality, Time	Source of information and methods used to verify achievements	
Purpose Direct benefits to the target group(s)	How the purpose is to be measured including Quantity, Quality, Time	As above	Assumptions affecting linkage Overall objectives and Purpose
Results – Tangible products or services delivered t	How the results are to be measured including Quantity, Quality, Time	As above	Assumptions affecting linkage between Results and Purpose
Activities – Tasks that have to be undertaken	Inputs – human & physical resources required	Costs of human & physical resources required	Assumptions affecting linkage between Activities and Outcomes

As mentioned before, most agencies have adopted the LFA as a planning and management tool, however unfortunately the different donors use often different terminology e.g. specific objectives are names sometimes project purpose.

Step 5 - specify assumptions and risks

Assumptions

No matter how well a project is planned and prepared, things will not all go according to number of **external factors** are likely to affect the project's implementation and on sustainability but will lie outside its control. These conditions must be met if the project succeed, and are included as assumptions in the fourth column of the Log frame. Only if the objective and the assumption are achieved project move to the next level.

One of the project designer's roles is to identify these external factors, and as much as possible to build mechanisms into the project's design either to deal with them or to monitor the effect they are having. Therefore the probability and significance of these conditions being met should be estimated the risks of the project. Some will be critical to project success, and others of marginal importance. Once assumptions have been identified, they are stated in terms of the desired situation. In this way they can be verified and assessed. Some of the assumptions can be found in those parts of the objective tree that has not become part of the project strategy.

Examples of assumptions are:

- National standards for VET reflect the needs of the economy
- Government secures continued support for VET
- Employers co-operate with the project
- Existing staff stays with the training centre.

Most projects fail, not because of bad project design, but because of lack of attention to these factors that are either outside the control of the project or which are too difficult or costly to control. In the log frame we need to show that we have thought about what these factors might be. To complete the assumptions column of the log frame, first consider the risks. A risk is the potential for unwanted happenings. Every activity involves risks. If they happen, some risks will affect the activity more than others.

Risk assessment helps to identify them and consider the likelihood of them happening and their likely impact. The risks can then be managed by changing the project plans to ensure the risks are minimised.

Method of risk assessment

Step 1 Identify the risks by:

- looking at the various analyses that have been carried out, for example, stakeholder, economic, environmental, social, problem
- going back to the objectives tree and considering the constraints
- looking at each objective in the log frame and brainstorming the assumptions that have to be made in order for the higher objective to be achieved. A useful series of questions to ask is:
 - If we do these activities, what can stop us from delivering these outputs?

- If we are successful in delivering these outputs, what can stop us from achieving this purpose?
- If the purpose is achieved, what would stop it contributing to the goal?

Step 2 Use an Impact/Probability matrix to evaluate the risks.

List all the risks and number them. Then consider how likely it is that each one will happen (probability) and what the impact of each risk happening might be.

Think of the impact on project success and also the impact on the beneficiaries. Place the numbers in the matrix.

		IMPACT		
		Low	Medium	High
probability	Low			
	Medium			
	High			

Step 3 Think about measures that will reduce or eliminate the risks.

We may want to pay less attention to the risks that are low probability and low impact, although simple steps might reduce these. It is important to pay attention to the risks towards the bottom right-hand corner of the Impact/Probability matrix (high probability and high impact) as these in particular threaten the success of the project. If these risks cannot be reduced, it might be necessary to cancel the project.

Remember to add these risk-reducing measures to the project objectives. In terms of the log frame, this will involve adding more activities and possibly outputs.

Including risks in the log frame

Now return to the log frame and write the key risks as assumptions in **column 4**. These are the risks that could actually make the project fail if they happen. Some risks might be considered so critical that we decide not to go ahead with the project at all. The diagram below should help to decide which risks to include in the log frame as assumptions.

Once we have considered the risks, we can turn them into assumptions.

Risks and assumptions

Risks are negative statements about what might go wrong. Assumptions turn risks into assumptions positive statements. They are the conditions that need to be met if the project is to continue.

For example, consider a risk in an agricultural extension project. By rewording the sentence to make it positive rather than negative, the risk can be changed into an assumption:

It is usual to write assumptions rather than risks in **column 4**.

Avoid mixing risks and assumptions.

There will normally be fewer key assumptions at activity level, and the degree of uncertainty will increase for the higher objectives. This is because we have less control over higher levels. It is easier to change activities or add new ones to reduce the risk. It is harder to take action against some of the risks that threaten the use of outputs to achieve the purpose, or the way in which the purpose contributes to the goal.

'If-And-Then' test:

For each objective in the LFW, consider what assumptions need to be made in order for that objective to lead to the objective at the next level. Test the logic using the **'If-And-Then' test**:

	Summary	Indicators	Evidence	Assumptions
Goal				
Purpose				
Outputs	Then			
Activities	if			and

As external conditions may change, it is vital that we carry out further risk assessments throughout the course of the project to ensure that we take account of all threats to its success. Some log frames may require completion of an additional box labelled Critical conditions or Pre-conditions. These refer to things that must happen before the project can start. Ask questions like:

- Will we be able to find qualified staff at the salaries being offered?
- If resources are to be supplied by other agencies or government, when will they be available?
- Will essential supplies or funding be available at the time we want the project to start?

	Summary	Indicators	Evidence	Assumptions
Goal				
Purpose				
Outputs				
Activities				
				<i>Critical conditions</i>

Step 6 – identify indicators

Indicators and evidence

Simply stating an objective is not sufficient. It is important to establish ways of measuring the progress that is being achieved. To ensure that an objective is measurable it must be accompanied by indicators, which specify the information required. At the same time, the means of measurement of the indicators should also be specified. Indicators should also fulfil certain criteria - Quantity, Quality and Time (often known as QQT)

There are four steps involved in the selection of indicators:

- **Define the indicator:** e.g. educational status improved
- **Set quality:** e.g. number of graduates completing degree courses increased
- **Set quantity:** e.g. number of graduates completing degree courses increased from 500 to 1000
- **Set time:** e.g. number of graduates completing degree courses increased from 500 to 1000 by the year 2007

Care must be taken to ensure that the indicators selected are specific to the objectives - in other words, they really will show whether the objective is being achieved or not. Often though, different people have their own interpretation of what a project is trying to do. When the planners and the people implementing the project differ in their interpretation of objectives, the result can be very damaging to project performance. Selection of indicators is a helpful exercise in clarifying precisely what is meant by an objective, and in ensuring that the objective is realistic, specific and measurable.

Measurement

When indicators are formulated, the source of information and means of collection should be specified. This will help to test whether or not the indicator can be realistically measured at the expense of a reasonable amount of time, money and effort.

The Measurement column should specify:

- The format in which the information should be made available (e.g. progress reports, project accounts, project records, official statistics etc.)
- Who should provide the information
- How regularly it should be provided (e.g. monthly, quarterly, annually etc.).

Sources outside the project should be assessed for accessibility, reliability and relevance. The work and costs of collecting information to be produced by the project itself should also be assessed, and adequate means provided. Indicators for which one cannot identify suitable means of measurement should be replaced by other indicators. If an indicator is found to be too expensive or complicated to collect, a simpler, cheaper indicator should replace it.

Indicators are targets that show (column 2 of progress towards achieving log frame) objectives. They answer the question 'How do we know whether or not what we planned is

happening, or has happened?’ Indicators help us to monitor, review and evaluate the project. They enable us to know whether the project plans need adjusting. They help us to learn lessons from a project in order to avoid making the same mistakes in other projects.

Log frames sometimes call indicators ‘**Objectively Verifiable Indicators**’. The term ‘objectively’ is used because indicators should not depend on the point of view of the person measuring them. It should not matter who measures them – the same result should be reached. So it is better to ask two people to measure attendance at a meeting by counting the number of people there, than to ask them to grade attendance on a scale of very poor, poor, adequate, good or very good. One person might think attendance is very good while another might think it is only adequate. This would depend on their past experience of meetings and their own expectations of how many people might attend this one.

It is important to think about **who should identify and measure the indicators**. Primary stakeholders should have an opportunity to set indicators because:

- it enhances the ownership and transparency of the project
- primary stakeholders might be able to think of appropriate indicators that project staff based outside the community would not have considered
- some things are most easily measured by the primary stakeholders themselves
- primary stakeholders can be encouraged and empowered by the progress of the project.

There are many **different types of indicators** to consider. Try to be creative and use a indicators mixture in order to ensure that the objectives can be measured effectively and that monitoring and evaluation needs can be met.

- **Formative** indicators (also called milestones) are used during an activity, phase or project to show whether progress is on track.
- **Summative** indicators are used at the end of the project for evaluation.
- **Direct** indicators measure the objective directly, such as the number of children attending school.
- **Indirect** indicators (also called Proxy indicators) are used if direct indicators are not appropriate or possible if, for example:
 - results cannot be measured directly, such as quality of life
 - direct indicators are too expensive to measure
 - direct indicators can only be measured after the project has ended.

For example, to measure an increase in literacy it might be difficult or costly to interview children, but the number of books borrowed from the school library might give you an indication of whether or not literacy has increased.

It is easier to measure behaviour than feelings because behaviour can be observed. So if we want to measure whether people feel more confident, we could observe how often they speak in community meetings.

Quantitative indicators can be analysed in **numerical form** – who, what, when, where, how much, how many, how often? This might include:

- how often things happen
- number of people involved or affected

- growth rates
- uptake, for example, school enrolment, visits to clinic, adoption of new seed varieties.

Qualitative indicators measure things that **cannot** be counted, like:

- satisfaction, opinions
- decision-making ability
- changes in attitude.

Try to use a mixture of quantitative and qualitative indicators so that we can be sure to capture the real progress and impact of the project. Imagination is very important when setting indicators. It can help to ask a group of stakeholders setting indicators to close their eyes and imagine how the situation will be improved by the end of the project. What do they hear, see, touch, feel and smell that will be different when the main problem has been addressed? If we are aiming for holistic development, then our impact on spiritual well-being should be as great as that on physical well-being. Spiritual indicators are particularly difficult to set. Indirect indicators might have to be used.

Setting good indicators - Indicators should be:

- **Relevant** is the indicator relevant to the objective it is measuring? for example, if an objective is 'to increase hand pump use', measuring the number of hand pumps produced would not a good indicator because it does not measure how many are actually being used.
- **Sufficient** is more than one indicator needed?
- **Specific** quality, quantity, time (see qqt box on page 54).
- **Measurable** can the indicator realistically be measured?
- **Sensitive to the changes** that will be happening as a result of the project or programme – if the planned changes happen, will the indicator still be appropriate and measurable?
- **Cost-effective** can the indicators be measured with reasonable cost and effort? is the cost of measuring the indicators proportionate to the total project cost?
- **Available** can the indicator be measured at the planned time? For example, consider seasonal climatic change.

The term **QQT** is often used to ensure that indicators are specific. QQT stands for:

- **quantity** – the extent of the change – by how much, how many
- **quality** – the kind of change
- **time** – by when the change should take place.

Method for setting indicators

Work **horizontally** across the log frame, brainstorming indicators that will measure each objective. This could involve referring back to the problem tree.

The effects in the problem tree can be turned into indicators.

- If there is a long list of possible indicators for one particular objective, try to reduce the list so that only the essential ones are included. We need enough to be able confidently to measure the achievement of the objective, but not so many that we will waste time and money.
- Make sure the indicators are good (QQT) and there is a good selection – quantitative and qualitative, formative and summative.

Remember that the log frame is a living document that needs to be looked at and revised regularly. Some of the indicators might need to be changed during the project if they are inadequate or too difficult or expensive to measure.

Purpose - Indicators can be difficult to identify at purpose level. This is because the indicators objective often defines a change in behaviour, which can be difficult to measure. Some creative thinking is needed for setting indicators at this level.

Output indicators Output indicators should be easier to measure than higher level objectives, because we have more control over these objectives. The output indicators can be transferred to the terms of reference for the member of staff or consultant that is responsible for delivering the outputs.

Activity indicators The indicators at activity level usually include a summary of the inputs or budget. The clearest indication of whether activities have happened successfully is if the outputs have been delivered. However, for complex outputs it can be useful to include activity level indicators that show progress towards completing the outputs.

Evidence

Evidence is called 'Means of Verification' in some log frames. It describes the sources of (column 3 of information we will use to measure the indicator. For example, body temperature is an log frame) indicator of health. A thermometer provides the evidence.

For the log frame, consider:

- the type of data needed, such as a survey
- the source of the data – whether secondary (collected by someone else) or primary (collected by our organisation)
- who will collect and document the data
- frequency and dates of data collection. For example, monthly, quarterly, annually.

When appropriate evidence for each indicator has been identified, consider whether it is:

- **Available** if we want to use secondary data, will we be able to gain permission to access it? will it be reliable?
- **Low-cost** will the information be too expensive to collect?
- **Timely** Will we be able to collect the information when we need it? Consider seasonal variations in climate. If we want to use secondary data, will it have been collected at the right time? Sometimes government statistics are not released until some months after the data was collected because it takes time for them to be analysed.

If the evidence is not available at low cost at the right time, the indicator should be changed to one which can be measured more effectively.

GLOSSARY

Different organisations use different terms for the components of the log frame. We explain the terms simply below. Wherever we are aware of alternative names used by other organisations, we provide that name in brackets.

1. NARRATIVE outlines the objective – what it hopes to achieve and how. There are many different words that describe different types of objectives. We use the term ‘objective’ as a general term for a desired change. In the log frame, the summary separates out the different levels of objectives to form a ‘hierarchy of objectives’ and uses special terms to refer to each level.

2. GOAL refers to the overall problem we are trying to address. It is sometimes referred to as the wider development objective. This might be improved incomes, improved access to water or reduced crime. Example: Improved farm productivity by small farmers.

3. PURPOSE is the specific change that we want the project to make to contribute to the achievement of the goal. It is sometimes called the Immediate Project Objective. Example: Improved farming methods and varieties of rice adopted by small farmers.

4. OUTPUTS are what we want to see as a result of our activities, in order to fulfill the purpose.

5. ACTIVITIES describe the tasks we will carry out. Example: Training Farmer participatory research into crop varieties.

6. INDICATORS answer the question ‘How do we know when we have got there?’ They are (Measurable/signs which measure project performance against objectives and play an important part in monitoring and evaluation.

7. EVIDENCE refers to the source of the information needed to measure performance, who (Means of will be responsible for collecting it, and how often. Example: Sample survey carried out by project staff at the end of year 3.

8. ASSUMPTIONS refer to the conditions that could affect progress, success or long-term sustainability of the project. There may be external factors which cannot be controlled or which we choose not to control. It may be possible to reduce the project’s vulnerability to factors which cannot be controlled. These could include climatic change, price changes and government policies.