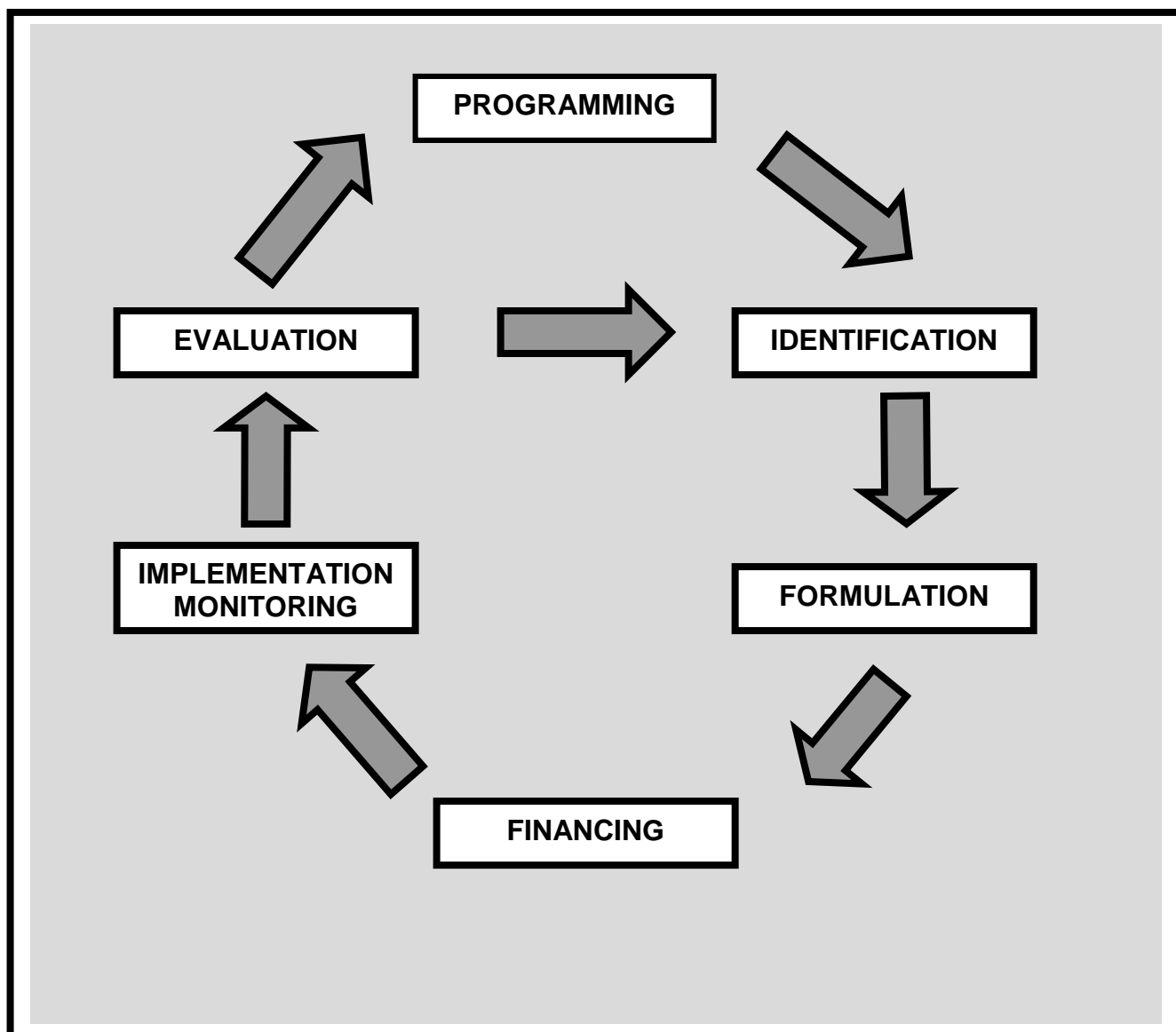**VLAAMSE INTERUNIVERSITAIRE RAAD**
(VLIR)
FLEMISH INTERUNIVERSITY COUNCIL

PROJECT CYCLE MANAGEMENT
(PCM)
GENERAL VLIR MANUAL
Draft of July 2002

This manual represents a basic and general overview as to how the Project Cycle Management method is used in the context of the University Development Co-operation (UDC) initiatives of VLIR.

The manual draws on both the '*Integrated Project Cycle Management and Logical Framework*' compiled by South Research and the EU Manual on '*Project Cycle Management*' :

In addition to this general manual, the following 2 other manuals will be available in due course:

- *General Guide for the Assessment of VLIR-UDC proposals*
- *How to organise a Logical Framework Planning workshop*

Furthermore and specific to either the Own Initiative (OI) programme or the Institutional University Co-operation (IUC) programme, 2 modules will be prepared that apply the general PCM method to specific formats of each of the UDC initiatives. As such, they will be part of an overall OI or IUC manual that will be compiled and made available to all involved in due course.

Brussels, July 2002

1. INTRODUCTION

1.1. PCM, its background and rationale

1.1.1. PCM, a 'Reference method' among many donors

Over the years, many organisations have gained experience with project management. Based on this experience, and the Logical Framework Analysis (LFA) which was developed in the 1970s and already widely used, the PCM method emerged. This approach, consisting of a set of project design and management tools, has meanwhile been adopted by development organisations such as the EU, GTZ, DANIDA and others. Also DGIC, BTC, VVOB and a number of Belgian NGOs are using PCM.

As an approach, PCM is partly a response to the fact that evaluations of development co-operation interventions often showed the following problems:

- Many of these projects are not relevant to the beneficiaries
- Risks are insufficiently taken into account
- Factors affecting the sustainability are ignored
- Lessons from the past are rarely incorporated into new policy and practices

The overall objective of PCM is therefore to improve the management and effectiveness of external co-operation interventions by respecting a number of key principles (see 2).

At a more operational level, PCM seeks improvements by ensuring a proper feasibility assessment, structured monitoring and evaluation activities and informed decision making at key stages in the preparation and implementation phases of projects and programmes[1].

1.1.2. Introducing PCM in the VLIR-UDC programmes

Following a decision by the then Secretary of State for Development Co-operation, which was formalised in 1998 through a framework agreement, VLIR has become responsible for the management of various UDC programmes insofar as the Flemish universities are concerned. With funding from the Belgian government, VLIR is therefore challenged to ensure quality programming and implementation in terms of the agreed upon UDC activities.

Resulting from a consultative process with the principal stakeholders, it was decided to introduce PCM as a method to enhance the effectiveness of the UDC interventions. A mission statement was developed and during 2000-2001 time was taken to apply the PCM principles to the specificities of UDC and to sensitise all stakeholders in this regard. Following a number of training sessions, and the production of a tentative PCM manual, it was decided that from 2003 onwards, all UDC interventions in the South would be designed and management based upon the PCM principles.

Like all concepts and tools however, the effectiveness and usefulness of PCM depends on the quality of its application, and in particular the ability of the different actors to access and use relevant information throughout the lifeline of a given project.

It is therefore anticipated that over the coming years, the capacity to apply PCM at the different levels (VLIR, Flemish and partner universities) will be further enhanced through training and review sessions such that a PCM learning cycle may further guide the work of VLIR.

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[1] Throughout this manual the word '*project*' refers to both a stand alone project – a group of activities to produce a specific objective in a fixed time frame , and a project as part of an '*IUC partner programme*' – i.e. a series of projects whose objectives together contribute to a common overall objective.

1.1.3. PCM and its benefits for project managers

As a method, PCM should not only be considered as a management approach for organisations such as VLIR. In fact, VLIR is confident that all managers of VLIR funded development projects will be able to appreciate its benefits.

While its benefits are clear in terms of using a commonly understood and transparent approach that ensure a thorough contextual analysis and subsequent planning (VLIR projects will be better projects), also project management as such will be facilitated (proper management tools will ensure quality monitoring of project implementation).

The logframe, being part of PCM, will provide project managers with a summarised intervention plan that will serve as a reference during the implementation. Based on the logframe, PCM will ensure proper operational planning. As a minimum, content and management related activities will be planned for in terms of their timing, financing as well as the people that are responsible for such activities.

In this manner, project managers and staff, enjoy the benefit of agreed upon plans and tasks. These can be easily monitored and timely adjusted whenever circumstances call for a revision.

In view of the increased attention for planning, proper monitoring and focussed reporting by project managers, VLIR will be in a position to reduce 'reporting as a requirement' but rather focus on objective oriented monitoring and reporting. Replacing unnecessary routine reporting by proper PCM supported management and monitoring tools will furthermore not only reduce the reporting workload for project managers but also enhance their ability to really direct and steer interventions towards strategic interventions that will produce benefits that have been agreed upon as a result of a participatory process.

1.1.4. Purpose, content and use of this manual

Purpose

The target group of this manual consist of all persons who require a brief introduction to the PCM approach as it is being applied by VLIR in terms of its UDC interventions in the South. In order to be able to relate PCM to the specifics of the OI or IUC projects, it has to be read in relation to the modules that refer to the specific formats. While formats may change over the years, this general manual is likely to remain relevant for the foreseeable future.

In terms of its users, a distinction needs to be made between the project cycle managers, and the project managers. While the project cycle manager ensures the proper adherence to the procedures that have been agreed upon in terms of managing the different project phases, the project manager manages the agreed upon project (mostly IUC partner programme co-ordinators and project leaders[2]). While in the context of the VLIR UDC activities, there may be an overlap (in particular for IUC partner programme co-ordinators), this manual is mostly directed towards those that will be designing and managing projects, hence its focus on the analytical steps and logical framework planning.

Together with training and related support services, this manual is part of the support services that VLIR wishes to avail to its clients to enable a smooth and timely introduction of the PCM method into the various UDC programmes and activities.

Content

This manual consists of the following 5 sections:

- Section 1 introduces the manual.
- Section 2 introduces the project cycle.

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[2] In this context, project leaders refers to both leaders of the IUC projects as well as the OI projects in the North and South.

- Section 3 introduces the Logical Framework Approach (LFA). Being the single most important component of the PCM method in terms of the involvement of the project leaders, this is the most relevant and applicable section for project leaders.
- Section 4 explains how to use the logframe to develop objective oriented operational planning schedules and focuses on project management issues in general.
- Section 5 briefly links, within the context of PCM, the logframe to the organisation of evaluations.
- Section 6 provides a glossary of terms. Given the fact that donors use different terms to describe identical concepts, this glossary presents the terminology that will be used in the context of VLIR UDC activities.

Boxes, examples and figures

In terms of layout and presentation, the content of this manual is organised as follows:

- The textual introduction provides a general explanation of the concept or technique presented
- 'How to boxes' provide a more systematic guidance on how to actually apply some of the methods
- 'Remark boxes' provide additional tips and comments in terms of applying the concepts.
- 'Examples' are either presented in boxes or in the main text. In most instances, this manual will refer to a particular project (striga research) throughout its different sections. In some instances however, reference may be made to other more appropriate examples.

In annex 1 to the manual, a number of other examples are provided such that the user can compare different logframes that refer to different projects.

2. PCM – ITS KEY PRINCIPLES AND COMPONENTS

In essence, PCM is a collection of relatively simple principles, concepts and techniques that could be summarised as follows:

PRINCIPLES	TO ENSURE…
1. Respect for the concept of the project cycle and its different phases…	1. …structured and informed decision-making at the different stages of project management
2. Beneficiary (client) and stakeholder orientation…	2. …involvement and commitment of stakeholders
3. A consistent project design using the logical framework…	3. …a comprehensive and consistent analysis and planning
4. Attention for factors of sustainability or quality	4. …that from the design onwards mechanisms are put in place that will continue the flow of benefits
5. Integrated approach using standarised documentation…	5. …that interventions are linked with wider development efforts, all PCM tools are linked and mutually reinforcing and procedures and documents are simplified and transparant

Jointly, these (management) principles are meant to direct the interventions towards a continuous focus on the objectives of the project in terms of sustainable benefits for the intended target groups. The above 5 principles are explained in more detail in the following sections.

Among these principles, the Logical Framework Approach (LFA) is a very important component especially for project leaders. However, in the context of PCM it is but a methodology that should be embedded in a wider and integrated management system.

PROJECT CYCLE MANAGEMENT	LOGICAL FRAMEWORK APPROACH
Defines different phases in the project life with a well defined process of involvement of different stakeholders, management activities and decision-making procedures	A methodology for analysing, planning, managing and evaluating programmes and projects, using tools to enhance participation and transparency and to improve orientation towards objectives.

2.1. The concept of the project cycle

The way in which programmes or projects[3] are planned and carried out follows a sequence beginning with an agreed strategy, which leads to an idea for a specific action, which then is formulated, implemented, and evaluated with a view to improving the strategy and further action. This sequence is called the project cycle.

While VLIR is still in the process of elaborating the procedures and structures that correspond to each of these phases, procedures that will be evolving over time, the activities, involved actors and outputs for each of these phases could be summarised as follows.

2.1.1. PRIOR TO PROJECT IMPLEMENTATION

Programming[4]

Programming is concerned with the establishment of general principles and guidelines for VLIR projects and programmes. Based on the VLIR vision and mission statement, the intervention types and guidelines to elaborate projects are determined. The main actors involved are VLIR and DGIC. The outcome are typologies of projects that can be funded and general conditions for the acceptance of project proposals. Within the context of the IUC programme, it also includes the actual selection of the partner universities. Within the IUC it therefore combines elements of programming and identification.

Identification

Within the VLIR programme framework, problems, needs and interests of possible stakeholders are analysed and ideas for projects and other actions are identified and formulated in broad terms. This involves a study of the project context to obtain an idea of the relevance, the feasibility and sustainability of the proposal. A comparison of this information with the funding criteria will allow an assessment of the funding chances. In the OI programme, the main actors involved are the concerned promoters. In the context of the IUC programme, the partner organisation will take a lead role in this phase. The outcome are preliminary OI proposals or a IUC programme consisting of various projects.

First appraisal

With reference to the pre-determined criteria the preliminary proposals are analysed and prioritised. The OI selection commission as well as the IUC commission are the principal actors in this regard. The outcome of the appraisal phase consists of a list of projects that are admitted into the formulation phase.

Formulation

During the formulation phase the promoters and project leaders engage in an intensive and participatory process of information collection and analysis followed by a planning process that includes operational issues such as activity and resource scheduling. In the context of the IUC programme, the formulation process will be preceded by a call to identify interested Flemish counterparts. Only when the project idea, formulated by the partner institution and adopted by the IUC commission, meets interest in Flanders and henceforth allows for the appointment of a Flemish project leader, the formulation process can be initiated. This phase of the cycle leads to final project proposals that can be submitted to the VLIR for a funding decision.

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[3] In the framework of the VLIR UDC activities, programmes may refer to (1) the overall programming at the level of a set of activities such as the OI programme or the IUC programme or (2) in the case of IUC at the level of a partner programme with a partner university. In this case however, the term partner programme distinguishes it from the more general IUC programme. Projects are then individual OI projects or projects within a single IUC partner programme.

[4] Programming is to be distinguished from the selection of new partner universities within the context of the overall IUC programme.

Funding decision

> The OI and IUC commission engage in a final appraisal and review process resulting in a decision whether or not to fund the project. This phase is concluded with the signing of a formal agreement between VLIR and the concerned partners.

2.1.2. DURING PROJECT IMPLEMENTATION

Implementation, monitoring and mid-term evaluation

> In this project phase all actors are involved. Project activities are undertaken as planned and proper monitoring of the output delivery, implementation process, management and assumptions allows for timely corrections and adaptations as and when required. During implementation mid-term evaluations may be conducted to review the extent to which results and objectives are being attained. Progress reports are being produced and the planned implementation process is being appropriately monitored to ensure the achievement of the intended objectives. In the case of the IUC programme, two 5-year implementation phases are envisaged. At the end of phase I, a decision is therefore taken in terms of extending or terminating the concerned IUC programme or some of its constituting projects.

2.1.3. AFTER PROJECT IMPLEMENTATION

Evaluation

> The aim of an evaluation is to determine the relevance, effectiveness, efficiency, impact and sustainability of the intervention. 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. Such an evaluation can be conducted at the end of the implementation phase (*final evaluation*) or afterwards (*ex-post evaluation*). In addition to the various project partners, VLIR and selected external institutions such as DGIC and independent experts are important actors during the project phase. The outcome may consist of lessons learned and feedback that is channelled into future PCM and policy and programme frameworks.

> *Remark:* *Given the nature of the IUC programme, the different project cycle phases may be handled in a more dynamic manner. During the 10 year implementation phase, new projects may emerge such that within a partner programme cycle (10 years), separate project cycles may be envisaged. The IUC commission will therefore be of a somewhat different nature as it is expected to appraise and/or monitor project interventions within a broader partner programme framework.*

2.1.4. PCM PROVIDES A LEARNING FRAMEWORK

> In short, in PCM each specific phase has its own function and is being implemented on the basis of the information gathered during the previous phase and on decisions taken at that moment. Every phase completes and updates the information of the previous phase and allows to take adapted and refined decisions. PCM, when properly applied, therefore provides a framework for ongoing learning and improvement in terms of the effectiveness of the UDC interventions.

> In order to properly respect the different project phases, a distinct separation of roles must be observed. It means that the actual project planning is done by the stakeholders, including ultimate beneficiaries such as farmers and intermediary organisations in the case of (applied) research. The project cycle managers (VLIR and to some extent the IUC co-ordinators) will assess the quality and completeness of the outcome of the planning process but refrain from becoming the 'owners' of the project at the expense of the stakeholders themselves. PCM and with it, the LFA as such provides a learning framework at different levels, such that ongoing revisions may contribute to enhancing the overall effectiveness of the VLIR UDC interventions.

THE VLIR PROJECT CYCLE FOR OI AND IUC[5]
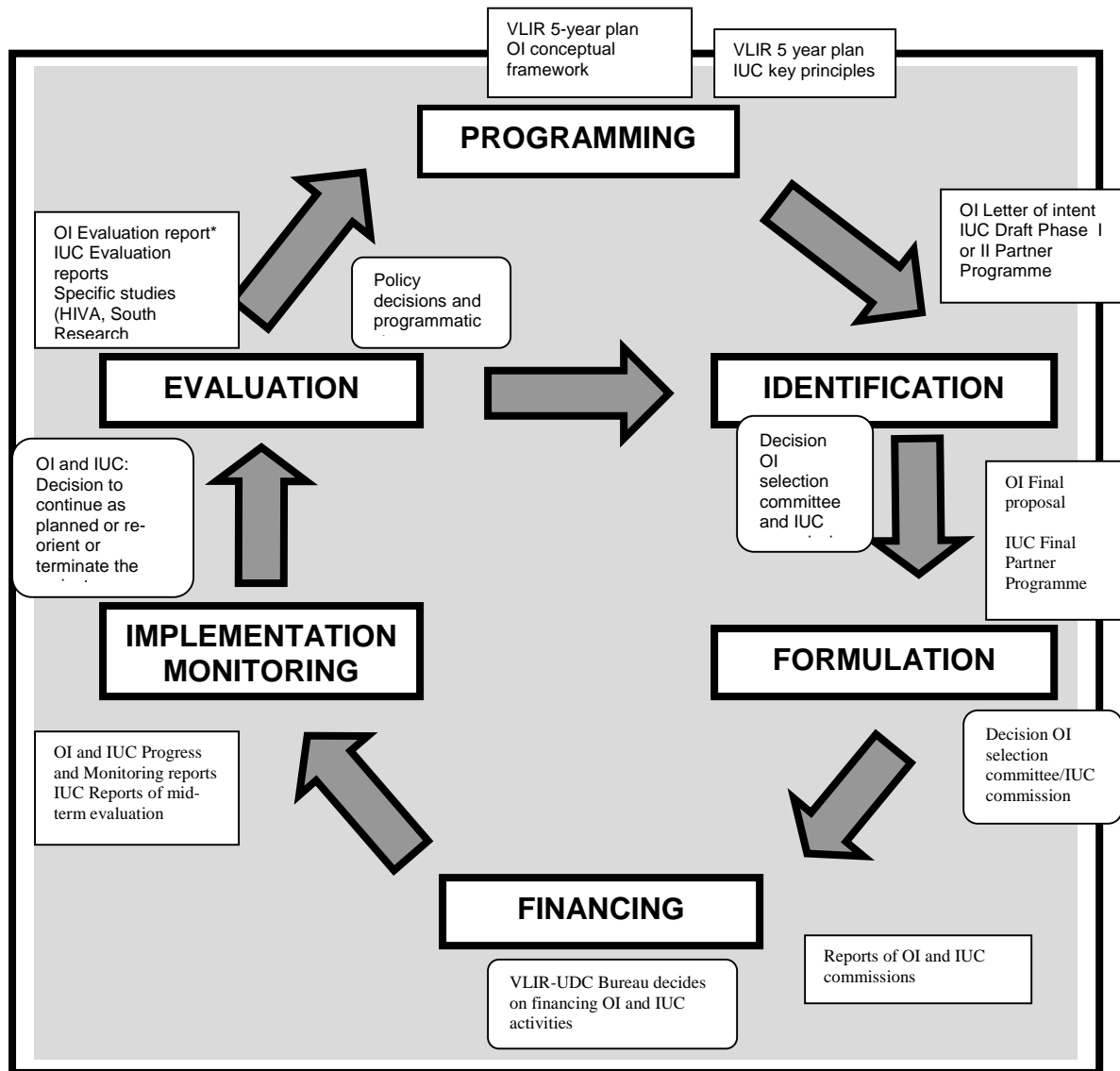
2.2. Beneficiary and stakeholder orientation

The last 30 years has shown that the active participation of stakeholders in all stages of the project cycle is a critical factor of success. Their participation will not only enhance the ownership of the project, but also ensure that maximum use is made of the knowledge and experiences of all relevant actors involved. Henceforth, the effectiveness and efficiency of the project will be increased.

In case of the VLIR UDC programmes, the local partner organisation is undoubtedly the major stakeholder and project support should thus be directed to the priorities and needs as identified by the partner. However, in view of the fact that the UDC programme guidelines call for a partnership requiring mutual exchange of knowledge and expertise, the project that is finally defined must be the outcome of a negotiation process between all stakeholders, including the Flemish project leader.

While in origin the VLIR UDC activities must be '*demand driven',* a transparent negotiation process must ensure that the expectations of all are clarified and considered. As VLIR UDC activities are collaborative in nature, both the interests of the Northern and Southern partner must be taken into account in the process of project formulation. To some degree, the VLIR UDC approach therefore embraces the notion of '*demand initiation and negotiated collaboration to ensure sufficient mutual interest'.*

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[5] The presented cycle is expected to be fully operational by early 2003.

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In this regard, a distinction can also be made between the client orientation at the level of the academic objectives (academic relevance and partnership between primary academic stakeholders) and the client orientation in terms of the developmental objectives (developmental relevance and beneficiaries external to the partner institute). The nature of the project (applied research oriented as compared to institutional capacity building) will therefore determine the profile of the clients. Whether they are university staff or students or neighbouring communities, they must be involved at the project design stage.

While a broad range of approaches and tools has been developed to increase the participation of the different groups of stakeholders[6], PCM serves as the major integrating approach to which all such tools are related.

> *Remark: Overall, NGOs have a strong tradition in terms of participatory approaches that can ensure proper client orientation. Therefore, project leaders are encouraged to seek their involvement when appropriate. However, project leaders themselves are expected to be willing and able to conduct workshops with stakeholders to ensure proper client orientation and involvement.*

2.3. A consistent project design using the logical framework approach

Evaluations have found that many projects are still being formulated in terms of the delivery of hardware rather than the creation of benefits for the identified target group. In the context of PCM, the Logical Framework is used as the analytical tool to ensure a consistent project design. In this regard a distinction must also be made between the logical framework approach, i.e. a process to progressively complete the logframe, and the logframe (matrix) as such, which is a summary output of this process.

The logframe tool involves the presentation of the results of an analysis in such a way that it is possible to set out the project objectives in a systematic and logical way. This should reflect the causal relationships between the different levels of objectives, the indicators defined to check whether these objectives have been achieved, and to establish what assumptions outside the control of the project/programme may influence its success.

The main results of this process are summarised in a matrix which shows the most important aspects of a project in a logical format (*the logframe*).

In addition to analysis and design, the logical framework is also useful for the implementation of a project, as well as for its evaluation (see section 6). It thus plays a role in each phase of the cycle. The framework should be drawn up during preparation (identification) although it cannot be fully completed at this stage, but will fill up gradually in the ensuing phases of formulation, financing, implementation and evaluation. The logical framework thus becomes the tool for managing each phase of the project cycle and a '*master tool*' for creating other tools, such as the detailed budget, the breakdown of responsibilities, the implementation schedule and a monitoring plan.

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[6] Reference is made to Participatory Rural Appraisal (PRA) techniques, Objective Oriented Project Planning (OOPP) and other tools that can enhance participatory project design, implementation and monitoring.

THE LOGICAL FRAMEWORK MATRIX

	INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	SOURCES OF VERIFICATION LOGIC	ASSUMPTIONS
OVERALL OBJECTIVES ACADEMIC/DEV.				
SPECIFIC OBJECTIVE				
RESULTS				
ACTIVITIES		MEANS	COSTS	

PRE-CONDITIONS

2.4. Attention for factors of sustainability

Sustainability can be described as the degree to which the benefits which are to be produced by the project for the beneficiaries continue for an extended period after the main assistance of VLIR has been completed.

While sustainability is a general concern in terms of development interventions, the PCM method requires that the factors that could affect the sustainability issue are systematically considered from the planning stage onwards. In this manner, PCM ensures that sustainability is in-built rather than an add on concern towards the final stages of implementation.

> *Remark:* *In general sustainability (defined as the continuous delivery of benefits to the beneficiaries) in the context of VLIR UDC poses a major challenge. As such, the concept will be further defined. As a general reference however, the VLIR intervention aims at building the capacity of partners to be able to achieve self-reliance, either through internal or external resource mobilisation.*

2.5. Integrated approach using standardised documentation

Lastly, PCM links together the activities at various levels, both witin the framework of the intervention (programming, project planning and implementation) as well as beyond (national or sectoral frameworks). This ensures a proper vertical integration.

Furthermore, a standard terminology and set of procedures, assessment and evaluation criteria, and documents is utilised to ensure full transparency and mutually reinforcing good management practices throughout the project cycle. In the context of VLIR-UDC the learning cycle in terms of PCM is still very young. What is meant to be standardised is therefore also subject to change in view of evaluation activities at various levels of programme management.

> *Example:* *Standardised is not rigid! Recently, new formats have been initiated for both the OI and IUC projects. While these are part of the standardised documentation, VLIR wishes to collect feedback from all concerned as well as evaluate the usefulness of the information. Based on this learning cycle, the formats may be refined into a revised set of standardised formats.*

Linked objectives

National / sectoral objectives

NEAP   NIP

Logframe

Results-based work plans and budgets

Standardised documentation

OI Letters of intent and final proposal
IUC Different programme formats
Reporting formats
Deliberations of OI and IUC commissions
Evaluation reports

Remark: *PCM does not inflate VLIR reporting! Overall, it is expected that the project design phase (identification and formulation) will require more thorough analytical and planning activities. However, with a clear objective oriented project focus and quality monitoring in place, the reporting to VLIR can be reduced. As such, project managers will be freed from producing documents such that more time can be spent on actual monitoring and management.*

3. THE LOGICAL FRAMEWORK APPROACH

3.1. INTRODUCTION

3.1.1. A tool with limitations

The Logical Framework has proved its usefulness in helping those who prepare and implement projects to better structure and formulate their ideas and to set them out in a clear, standardised way. If the policy is misconceived or if the logic is poor, the logframe should reveal the contradictions. However, a tool, however good it is, cannot alone guarantee successful results (*'garbage in, garbage out'*). Many other factors will also influence a project's success, notably the organisational skills of the team or organisation in charge of implementation.

To ensure that the project cylce managers can assess the quality of the process that has led to the formulated logframe, both the OI and IUC formats call for some degree of reporting on the quality of the formulation process as such.

> **Remark:** *The OI and IUC formats are not about filling out new boxes and writing new text. Rather, it is a guide to encourage project leaders to do things differently. Apart from enhancing the quality of the project design, much of the information required will enable the OI and IUC commission as well as the VLIR desk officers to assess the degree to which indeed the formulation process has been following PCM/LFA.*

3.1.2. Not a blueprint but a dynamic management instrument

The establishment of a logframe should not be a blueprint exercise. Each logframe should be the fruit of a thorough analysis and a joint planning process whose quality depends upon a number of factors, including:

- the information available
- the ability of the planning team
- consultation of a balanced representation of stakeholders
- thorough consideration of lessons learnt.

The logframe must indeed be seen as a dynamic tool, which has to be re-assessed and revised as the project itself develops and circumstances change during implementation.

In the context of VLIR-UDC activities, due consideration will be given to the need to adapt the project to changing circumstances. In the OI programme, for example preparatory missions are possible to ensure that at the time of actual implementation, the initial planning is updated in view of contextual factors that may have changed compared to the situation when the proposal was formulated. The IUC mid-term evaluations for example, may result in a revision of the initial logframe. At the same time however, such flexibility, in particular where it concerns budgetary changes, is bound by regulations agreed upon with DGIC.

> **Remark:** *A re-orientation of the project and related logframe in view of changed circumstances is an indication of good management. Flexibility and change however are substitutes for bad planning or poor project design!*

3.1.3. Giving room to learning: Embedding the logframe within a broader PCM approach

Only when the logframe is embedded in a broader PCM approach, its potential limitations can be handled in a structured manner. The PCM approach should indeed allow for the constant integration of external changes, new insights, etc. that are the result of analyses and experiences gained during the project cycle. Within PCM, such integration and adaptations will be undertaken in a flexible but organised, transparent and negotiated manner. Only in this context, PCM guided learning can outweigh the inherent risks of rigidity.

VLIR is firmly committed to the PCM approach and is actively involving DGIC in its learning processes. It is therefore anticipated that the room for flexibility in terms of project implementation and its associated regulatory framework, is likely to further expand. Within the IUC partner programmes in particular, improved management practices are anticipated to generate timely and corrective decisions taken by an increasingly responsibilised team of project leaders.

3.1.4. The logical framework approach: two interlinked stages

Drawing up a logframe has two stages, which are carried out progressively during both the Identification and Formulation phases of the project cycle. Depending on the phase in the project cycle, their level of detail however differs. In view of the time and cost that is associated with an in-depth contextual analysis and participatory planning, VLIR is only expecting pre-selected project proposals to engage in the full fledged logframe analysis and planning approach that is explained underneath.
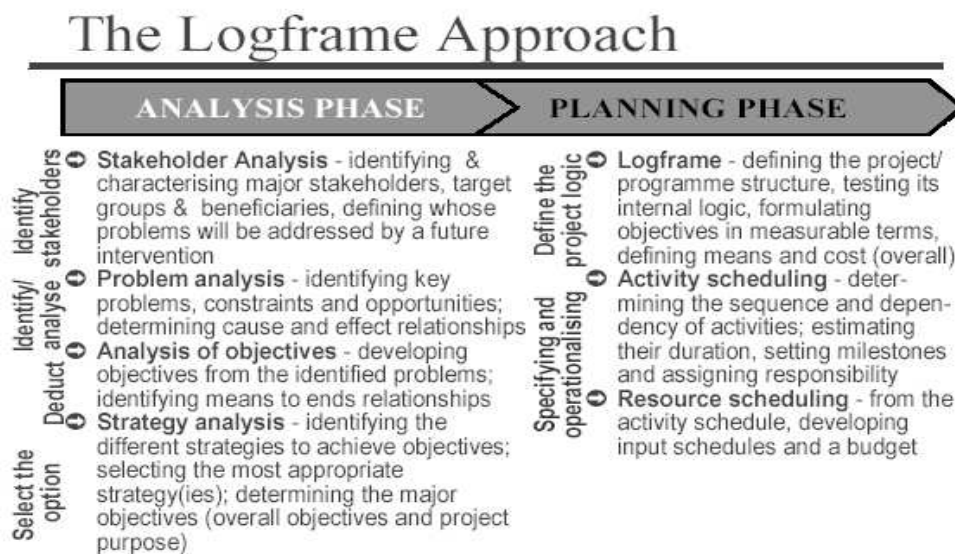
The Analysis phase (3.2.)

During the Analysis phase the existing situation is analysed to develop a vision of the 'future desired situation' and to select the strategies that will be applied to achieve it. The key idea is that projects are designed to address the problems faced by target groups / beneficiaries, both women and men. There are four steps to the Analysis Phase:

1. Stakeholder Analysis
2. Problem Analysis (image of reality)
3. Analysis of Objectives (image of an improved situation in the future)
4. Analysis of Strategies (comparison of different options to address a given situation)

The Planning phase (3.3.)

The planning phase involves the further development into a practical, operational plan ready to be implemented of the outcome of the analysis phase. In this stage there are two steps:

1. Completing the logframe
2. Outlining an operational plan based on the logframe (activity and resource scheduling etc.)

3.2. THE LOGFRAME APPROACH: THE ANALYSIS PHASE

3.2.1. Step 1: Analysing the stakeholders

A stakeholder analysis is often conducted in the preparatory stages of a project. The project stakeholders are individuals, groups of people or organisations who have an interest (a stake) in the (proposed) project and hence can have a positive or negative influence or contribution. Apart from various external actors, stakeholders consist of the project partners (those who implement the project), direct beneficiaries (the group that will be benefiting from the services of the project at the Specific objective level) and the indirect beneficiaries (those that will be benefiting from the project in the long run).

If a project wants to be successful, it is important to study the stakeholders' attitude, interest and potential influence on the intervention. In order to identify the stakeholders a number of questions can be used.

How to identify the project stakeholders?

Who has taken the initiative for the project?
Who will benefit from the intervention?
Who is interested in the proposed intervention?
Who has to participate in the proposed intervention?
Who might feel threatened by the intervention?
Who can contribute to the intervention?
Who works in the same field or domain?

This will allow a list of stakeholders to be compiled. Once the stakeholders have been identified, their characteristics, expectations, influence and power should be analysed.

How to analyse stakeholders?

What contacts are already existing between the stakeholders and the project leaders?
What is the stakeholders' interest in the proposal?
What can be his/her influence, power or contribution?

Based on the above, a participation or activity strategy is defined with regard to the strategic stakeholders. Such a strategy could consider ways to provide information to stakeholders regarding project progress, actual consultation or dialogue or even shared responsibility for some project components.

Linking the stakeholder analysis with all further steps

Stakeholder analysis and problem analysis are closely connected. Without people's views on a problem, neither its nature, nor their needs or eventual solutions will become clear. However, at some point in the process, a decision must be made regarding whose interest and views will be given priority. While a consensus may seem ideal, concentrating on the

interest of the core stakeholders may be more suitable. Such stakeholders must be consulted and involved as much as possible in the subsequent project design and planning phase.

Also during the implementation process, the stakeholder analysis must be a point of continuous reference. Whenever the logframe has to be revised, the evolving landscape of stakeholders must be considered.

An example: *During year 2 of the project, conflicts arise between the researchers and some leading farmers. This is jeopardising some on-farm trials and the research process. Knowing the close links between some local NGOs and the farmers, the project leaders actively involve these NGOs in setting up meetings to discuss the issues and revise the planning and related logframe.*

During year 3 of the project a mid-term evaluation calls for a considerable revision of the project. At this stage, the core stakeholders are consulted and involved in the re-planning process to ensure that support and relevance in view of these stakeholders are sustained.

STAKEHOLDER ANALYSIS SUMMARY MATRIX - AN EXAMPLE

Stakeholder	Type of contacts existing	Expectations , interest and attitude towards the initiative. Identify influence and resource potential	Implications and conclusions for the project. Possible action and/or participation strategy.
Local and Flemish promoter	Intense personal contacts via congresses. Local promoter has studied in Belgium	Strongly interested in further developing their knowledge and the capacities of their respective institutes. Flemish promoter seeks framework for student research. Local promoter wants to strategically develop his unit.	Visit of Flemish promoter to the local university.
Dean of the local faculty of agriculture	Via local promoter	Positive, has made some comments on initial proposal. Could facilitate recruitment of necessary research staff.	Ensure participation in review meetings. Send copies of reports.
Dean of the Flemish faculty of agriculture	Frequent formal and informal contacts of Flemish promoter	Positive, faculty staff are encouraged to develop new initiatives.	Keep him informed of development of the proposal.
Rector of the local university	A few contacts via local promoter	Not known yet	Inform him via Dean
Management of the Flemish university	No direct contacts; only via dean	Not known yet	Inform him via Dean
Faculty students	The proposals has been discussed twice with invited students.	At least 3 students are interested to participate in selected research activities.	Identify sub-topics for student research. Annual sharing of results and call for research proposals.
Ministry of agriculture	Good contacts via local promoter	Positive. Very important to ensure collaboration in view of extension potential. Possibility to second field staff and provide training facilities.	Keep them informed of progress. Invite him to second staff for training activities. Need to ascertain that local officials of ministry are also informed.
Ministry of Education	Some contacts via Dean	No outspoken positive attitude	Keep them informed via Dean
Agro-industry	No contacts yet	Not known yet	Urgently need to study their position. Local promoter will establish contacts.
Other research institutes	Institute X through formal meetings	Somewhat concerned. Some researchers in the same field would like to be involved. Seeking exchange visits and active involvement.	Include them in refining proposal.
NGOs dealing with agriculture	A few NGOs have been contacted and informed.	In principle they seem interested. Very influential at farmer level. Could greatly assist in contacts with farmers and participatory research approaches.	Before operational planning is made need to call a meeting. Seek collaboration and consider contracting them for sub-activities.
Farm leaders	One group discussion organised	Farmers have an interest but doubt they will benefit from this research. They are not willing to avail their fields for research activities.	Establish regular feedback and consultation meetings. Try to identify and convince some lead farmers to conduct some-on farm activities

3.2.2. Step 2: Problem analysis, establishing a problem tree

There are many ways to analyse a problematic situation, such as the analysis of existing studies and documents, discussions with different stakeholders and other key persons, base-line surveys, etc.

In order, however, to increase the coherence of this information and to enhance the participation and negotiation process a problem tree approach is commonly used. In the case of important projects, the organisation of a workshop in which the core stakeholders participate is recommended.

How to establish a Problem Tree?

1. Agree on a unit of analysis (define framework and subject)
2. Identify major problems existing in a given situation (brainstorming using individual cards)
3. Select an individual starter problem
4. Look for related problems to the starter problem.
5. Establish hierarchy of cause and effects (problems that cause the starter problem go below, other are put above).
6. Complete with all other problems accordingly.
7. Connect the problems with cause effect arrows
8. Review the diagram and verify its validity and completeness.

In terms of wording, problems should be stated as:

- negative situations and existing problems, not imagined ones and not as the absence of a solution.
- sufficiently detailed so as to communicate the true nature of the problem.

An example: Statements such as 'Lack of funding', Lack of trained staff, or No pesticides available are not proper problem statements rather they refer to the absence of a solution. They should be replaced by 'Operational costs cannot be covered', 'Staff has inappropriate skills' and 'Harvest is destroyed by pests'.
'Poor management' is too general and must be broken down further to understand what the problem is.

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

PROBLEM TREE - EXAMPLE

```
┌─────────────────────┐      ┌─────────────────────┐
│  Income of farmers  │      │   Food security is  │
│    is decreased     │      │     endangered      │
└─────────────────────┘      └─────────────────────┘
            ▲                            ▲
            └────────────┬───────────────┘
              ┌─────────────────────┐
              │ Productivity sorghum│
              │ production decreasing│
              └─────────────────────┘
                        ▲
```

Effects

```
┌─────────────────────┐                    ┌─────────────────────┐
│  Striga is infesting │                   │  Farmers have no remedy│
│     sandy soils      │                   │   to stop infestation │
└─────────────────────┘                    └─────────────────────┘
      ▲                                               ▲
┌──────────────┐  ┌──────────────┐  ┌──────────────┐  ┌──────────────────┐
│ Fertility of │  │  Striga is   │  │ Farmers do not│  │ No efficient     │
│ soils is     │  │  resistant   │  │ weed in time  │  │ herbicide to     │
│ decreasing   │  │  weed        │  │               │  │ combat striga    │
└──────────────┘  └──────────────┘  └──────────────┘  └──────────────────┘
                                                ▲
                    ┌──────────────────┐  ┌──────────────────┐
                    │ No research on   │  │ Excisting        │
                    │ striga is done   │  │ herbicides are   │
                    │                  │  │ not effective    │
                    └──────────────────┘  └──────────────────┘
                            ▲
                    ┌──────────────────┐
                    │ University has   │
                    │ insufficient means│
                    │ to conduct research│
                    └──────────────────┘
                            ▲
    ┌──────────────┐  ┌──────────────┐  ┌──────────────┐
    │ Researchers  │  │ No availability│  │ The MOA is not│
    │ have insuffi-│  │ of appropriate │  │ investing in  │
    │ cient know-  │  │ documentation  │  │ research      │
    │ how          │  │                │  │               │
    └──────────────┘  └──────────────┘  └──────────────┘
```

Causes

3.2.3. Step 3: Objective analysis, turning the problem tree into an objectives tree and projecting the desired future situation

After having analysed the present problematic situation, the stakeholders can start to reflect on which situation would be considered satisfactory. This reflection is important because its outcome will determine the different objectives and results to be included in the logframe. Basically, the objectives analysis converts the problem tree into an objectives tree.

Once complete, the objectives tree represents a comprehensive picture of the desired situation.

How to Establish an Objective Tree?

1. Reformulate all negative situations of the problem analysis into positive situations that are: (1) desirable, and (2) realistically achievable (in the example striga cannot be turned into a weed that is not quickly propagating!)
2. Check the means-ends relationships thus derived to ensure validity and completeness of the hierarchy (cause-effect relationships are turned into means-ends linkages)
3. If necessary (1) revise statements (see statement in italics in example), (2) add new objectives if these seem to be relevant and necessary to achieve (see example on extension statement in italics) the objective at the next higher level or (3) delete objectives which do not seem suitable/convenient or feasible (blocked cells in example).

OBJECTIVES TREE – AN EXAMPLE
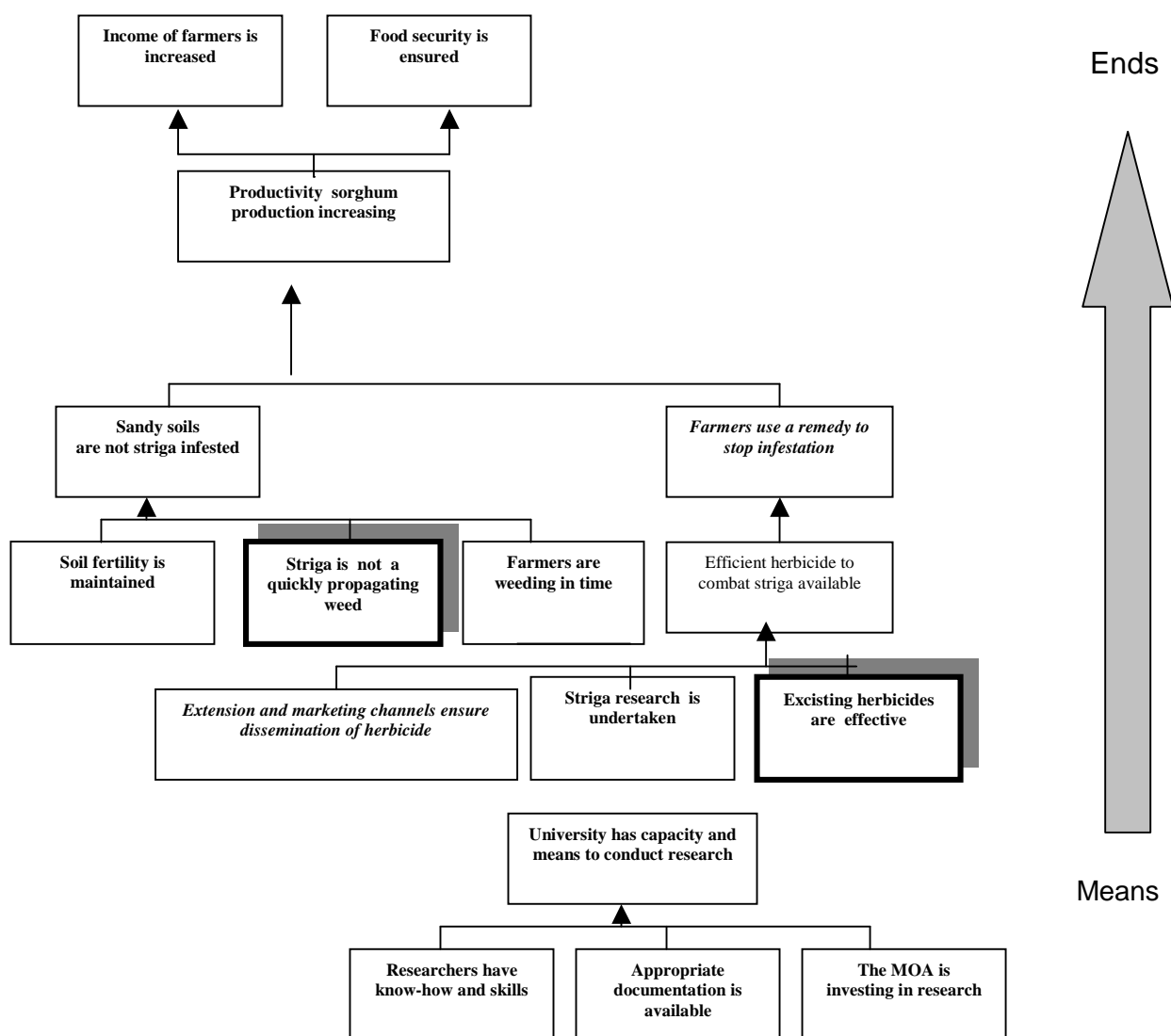
In the case of the 'striga project', having an efficient herbicide available by itself may not lead to increased productivity. As such, 'having' is changed by 'using'. At the lower 'means' level therefore the 'extension and dissemination channels' must be added.

3.2.4. Step 4: Analysis of strategies, what goes in the project

In the hierarchy of objectives, the different clusters of the same type can be called strategies. The different possible strategies have to be studied before the most appropriate strategy for the project can be selected. The most relevant and feasible strategy needs to be selected on the basis of criteria such as:

- Available know-how, capacities and interest of the stakeholders
- Complementarity with other actions
- Urgency
- Funding potential
- Social and/or political acceptability

How to Do a Strategy Analysis?

1. Identify objectives you do not want to pursue (not desirable or not feasible)
2. Group objectives, to obtain possible strategies or components (clustering)
3. Assess which strategies (or strategy) would be optimal in view of the agreed upon criteria
4. Determine Overall Objective(s) and Specific objective

Once identified, the selected strategy will be transferred to the first column of the logframe.

<u>Remark</u>: *While the conversion of the objectives tree into a logframe seems to follow a logical flow, this may in reality prove to be more difficult. This conversion therefore has to be undertaken with some degree of flexibility but with general reference to the outcome of the analytical phase. This is also the case in the striga example (compare problem tree with eventual logframe).*

STRATEGY ANALYSIS
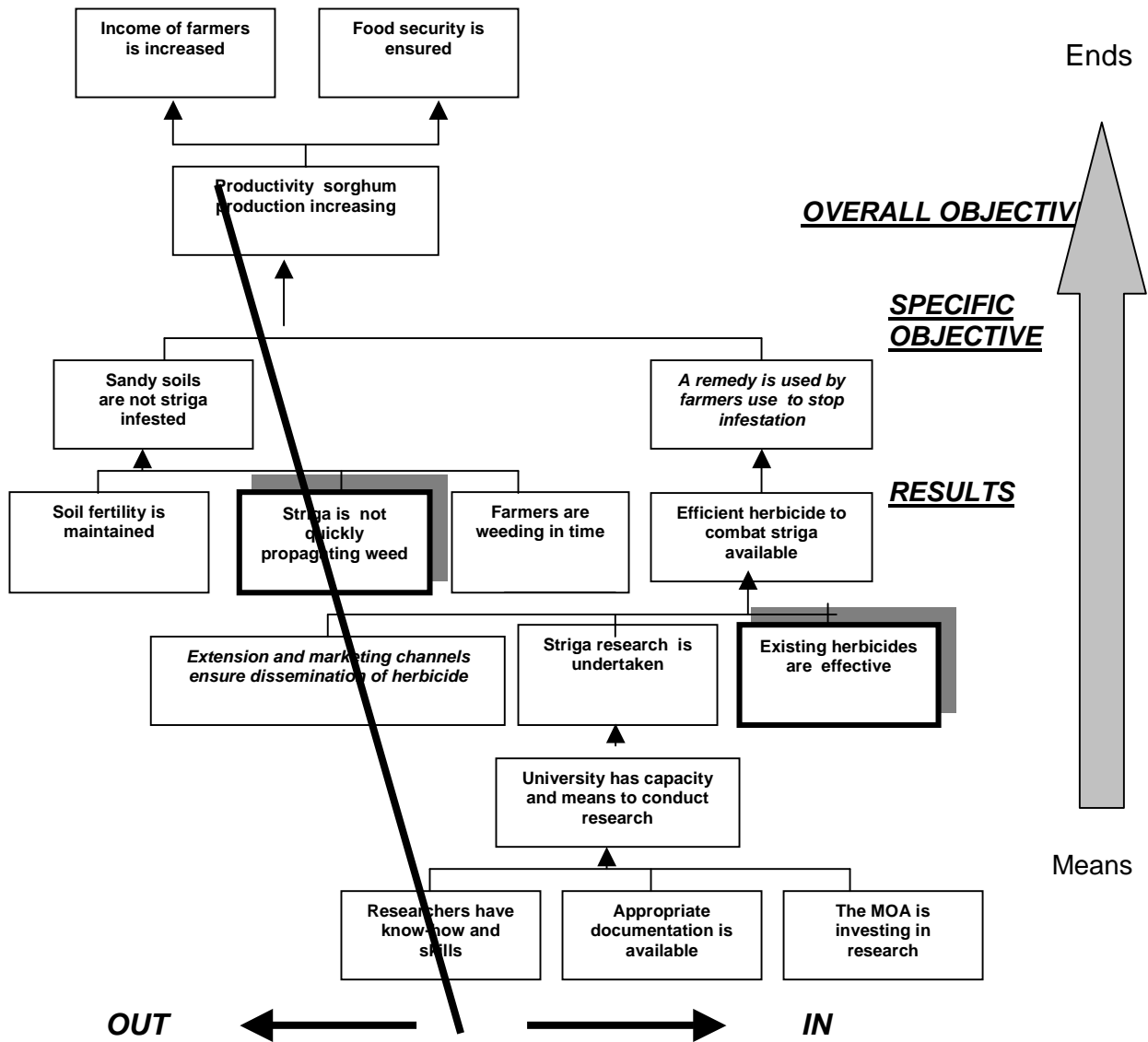
In the example it is clear that the 'Weeding and soil strategy' will not be addressed within the project. Rather, a strategy to ensure the availability of a remedy in terms of an effective herbicide has been selected. Within this strategy, however, the 'Extension and Marketing' intervention has also been dropped. In view of the specific mandate, capacities and funding mechanisms available to the collaborating partners choices can be made at different levels.

3.3. THE PLANNING STAGE: BUILDING THE LOGFRAME MATRIX AND ENSURING SUSTAINABILITY

The main document of the LFA is the logical framework matrix. It is a way of presenting the substance of the proposed intervention in a comprehensive form. The matrix has four columns and four rows:

- The *vertical logic* identifies what the project intends to do, clarifies the causal relationships and specifies the important assumptions and risks 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, and the sources where they will be verified.

HOW TO READ THE LOGFRAME?

The logframe matix is completed in the following step by step approach

Step 1: Description of the intervention logic (first column)

The first column of the matrix sets out the basic strategy underlying the project. This logic reads as follows. Means allow to carry out activities through whic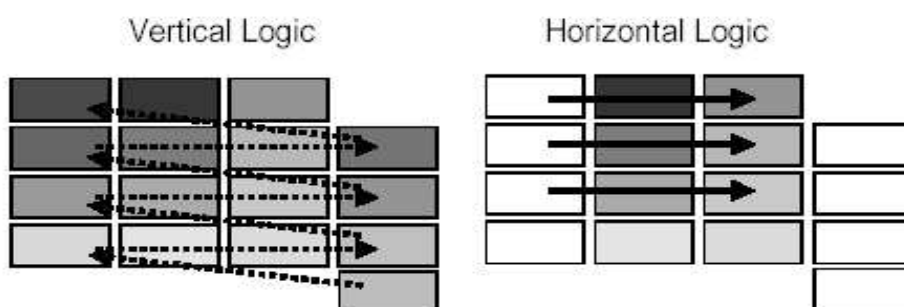h results are achieved. These results collectively achieve the specific objective that contributes to the overall objectives.

The *four levels of objectives* are defined as follows:

1. The *Overall Objectives* of the project / programme explain why it is important to society, in terms of the longer-term benefits to final beneficiaries and the wider benefits to other groups. The Overall Objectives will not be achieved by the project alone, it will only provide a contribution to the achievement of the Overall Objectives.
2. The *Specific objective* is the objective to be achieved by implementing the project. It should be defined in terms of sustainable benefits for the direct beneficiaries.
3. *Results* are "products" of the Activities undertaken, the combination of which achieve the specific objective of the project. They should be numbered.
4. *Activities* – the actions necessary to produce the Results. They summarise what will be undertaken by the project. They should be related to the Results by adequate numbering (Activity 1.1, 1.2….., 2.1, 2.2….).

An example: The activity 'to train 20 researchers/lecturers on ICT usage in agricultural forestry' leads to the output '20 researchers/lecturers are trained on ICT usage in agricultural forestry'. However, in terms of results, there should be an added value that is realised together with the other activities (equipment, curriculum development etc) contributing to the attainment of the result that could be formulated as 'the faculty is providing high quality teaching and research support to its students';

INTERVENTION LOGIC AND FORMULATION OF INTERVENTION LOGIC

High level objectives (academic and developmental) to which the project contributes. This can be at the level of the society (developmental) or the partner university (academic).

The specific objective should describe the benefits that the direct beneficiaries will derive from the project.

Results are different from outputs. Results rather describe the added value generated by the outputs that are a result of activities. Results are often formulated as services that can be used by the direct beneficiaries.

Activities explain what the project will do to produce the results.

```
OVERALL
OBJECTIVES
    ↑
SPECIFIC
OBJECTIVE
    ↑
RESULTS
    ↑
ACTIVITIES ← MEANS
```

When establishing the intervention logic, continuous critical questioning and reflection is required to ensure coherence means-effect links. At the level of results and activities the following questions must be raised:

- Are all the activities/results necessary to reach the results/Specific objective?
- Are these activities/results sufficient to reach the results/Specific objective?

Additional activities can be introduced in case the answer to the second question is negative (which will nearly always be the case). Certain activities can be dropped if the answer to the first question is negative.

Remarks:
1. Within UDC different types of overall objectives can be considered. A distinction can be made between:
1.1. the academic overall objective that is linked to the overall institutional capacity building of the university in terms of research, education, infrastructure etc.
1.2. the developmental overall objective that refers to developmental benefits that will be enjoyed by beneficiaries that may be external to the university as such
In most cases, however a proposed UDC intervention may contribute to both academic capacity development and wider societal developmental benefits.

2. While both the academic and developmental overall objective may be mentioned at the same level, VLIR argues that making a contribution to the academic overall objective will generate benefits at the level of the society. This in fact, is the essence of the VLIR mission. VLIR does not support universities for the sake of having strong universities, but rather to ensure that these universities will fulfil their role as development actors. In line with the above, one could therefore justify an additional level within the overall objectives. In view of the fact, however, that such a contribution to the society is difficult to assess, the developmental objectives will be formulated at the level of the intervention rather than the broader functioning of a university[7].

3. Ideally there should only be one specific objective. This ensures a proper focus of the project. In case more than one Specific objective is formulated, the objectives should be listed in terms of their importance in terms of contributing to the overall objectives.

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[7] The reference to the role of universities in the society is mostly applicable to the IUC programme that is directed towards institutional capacity building.

<u>*Step 2*</u>*: Identifying and assessing assumptions (fourth column of the logframe)*

Assumptions are important situations, events and conditions that are not controlled by the project but should be fulfilled if the project has to become successful and its benefits sustainable. As these assumptions are external to the project and cannot be influenced by it (at least not directly), they are included in the fourth column of the logframe. By doing so, the project management is constantly aware of the external risks and uncertainties the project is facing. The assumptions should be monitored regularly as they can change over time. If changes are observed, corrective measures may have to be taken to safeguard the success of the project.

When adding assumptions to the logframe, two different steps must be distinguished, namely the (1) identification of the assumptions, and (2) their assessment.

How to identify and assess assumptions?

1.   Identification of assumptions:
1.1. Identify in the hierarchy of objectives such objectives that are not covered by the selected
strategy but important for the success of the project
1. 2. Place them as external factors at the appropriate level of the logframe
1. 3. Identify other external factors not included in the hierarchy which must be fulfilled to achieve the Overall Objectives, the Specific Objective and the Results
1. 4. Identify necessary Pre-conditions which have to be met in order to start with project Activities

2.   Assessment of assumptions:
2.1. Assess the importance of the external factors by using the assessment chart. Depending
on the conclusions:
• Take out the external factor (almost certainly)
• Include the external factor as an Assumption (likely)
• Redesign the project (unlikely)
2.2. Check the Intervention Logic and Assumptions on completeness beginning with the <u>Pre-conditions</u>, to see whether the Intervention Logic is indeed logical and nothing has been overlooked.

In order to complete the fourth column the pre-conditions need to be listed. These are conditions that need to be met before the project can commence. They could relate to the commitment of staff and resources by the local partner, the signing of contracts etc.

At this stage of completion of the logframe, the vertical or intervention logic of the project has been finalised and as such it constitutes the essence of the project.

ASSESSMENT OF ASSUMPTIONS
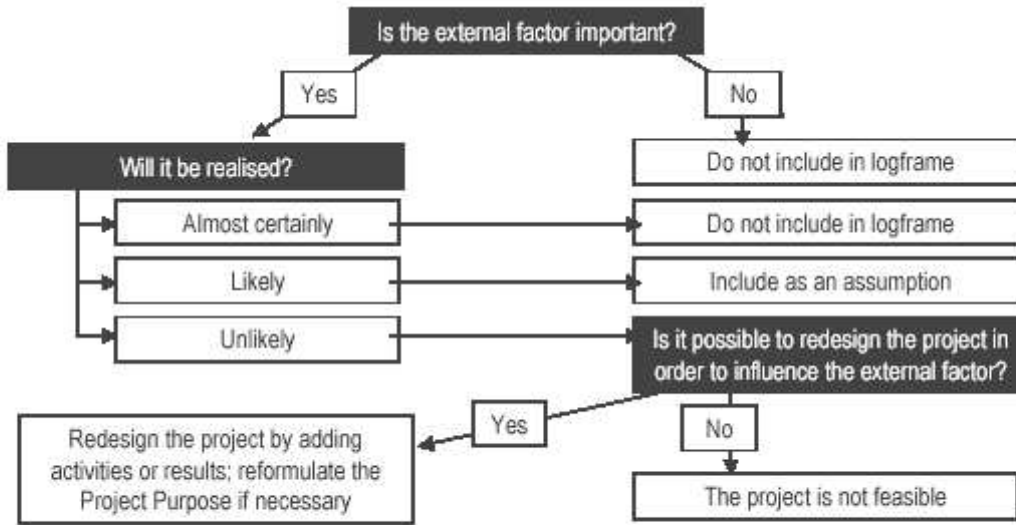
LOGFRAME MATRIX – VERTICAL LOGIC – AN EXAMPLE

PROJECT DESCRIPTION INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS (OVIs)	SOURCES OF VERIFICATION (SOV)	ASSUMPTIONS
Overall objectives • The sorghum production in region X has increased substantially as a result of the application of the recommendations developed by the institute (developmental objective – society level) • In terms of agriculture, the teaching and research capacity at university X has improved (academic objective – university level)			
Specific objective Recommendations which can be applied by at least 25% of the farmers in the area and which can be taken up in the extension strategy of the country are formulated.			Sorghum is an important crop in the area grown by most farmers. Farmers are adopting the recommendations.
Results 1 the academic understanding of the institute of all factors related to infestation of striga has increased. 2 applied research is successfully conducted. 3 the lab and other supportive services are functional.			First research shows that striga can be suppressed by using the right level of fertilizers
Activities 1.1 to offer post-graduate scholarships 1.2 to arrange for exchange visits 1.3 to equip the library and institute with the required materials 1.4 to arrange for participation to three international workshops on striga 2.1 to elaborate a common research proposal and an operational plan to execute the research program 2.2 to procure all the materials to implement the practical research 3.1 to equip the lab 3.2 to train personal of the lab 3.3 to establish a revolving fund to buy the necessary products for the lab			There is continuity in the research priorities of the faculty.
			Contract letters signed by all parties. Partner university approves the negotiated staff retention mechanisms.

….IF results are delivered, AND assumptions hold true, THEN the project purpose will be achieved…

Remarks:
1. Assumptions should be worded positively as external factors in such a manner that it is supposed that they will be realised.
2. Also in UDC projects, critical factors external to the project are often overlooked. This is in particular the case when sustainable institutional capacity building is looked for in a difficult contextual environment.
3. In case that the likelihood of the realisation of certain assumptions is difficult to assess, it is advisable to include the assumptions such that they can be monitored.
4. In the case of UDC projects, certain pre-conditions may be negotiated during the project design stage. These could relate to commitment concerning staff availability or retention etc. As such they could be part of the pre-conditions.

Step 3: Planning for sustainability

Once the intervention logic has been established, and prior to completing the logframe matrix, it is important to ascertain that already at this stage, the sustainability of the intended project benefits is analysed.

Based on a timely sustainability analysis, additional results or activities may be included in the project at the planning stage in order to increase the chances of sustaining the benefits. This analysis relates to (1) an analysis of the project logic and
(2) a review of some external factors.

(1) How to analyse the project logic for sustainability?

1. If we want that the benefits produced by the specific objective continue once the external assistance has been ended, is it then important that the intermediate results continue to be delivered?
2. If so, which results are to be continued? And which activities related to these results should be continued as well to ensure that the results continue to be delivered?
3. What are the chances that these activities indeed will continue after the project (i.e. when VLIR external resources are no longer available)?
4. If these chances are not high, then the following question is important: what can be done during the project planning and implementation phases to guarantee that these activities will continue in the post-project period?
5. The answer to this question will imply that probably additional activities (or even results) will have to be taken up by the project.
6. A similar analysis has to be conducted with regard to the assumptions to assess whether their probability will change once the project will have stopped.

INTERVENTION LOGIC - SUSTAINABILITY CHECK – AN EXAMPLE

Specific Objective:

Students and academic staff enjoy easy and reliable access to the internet.

Results:

The university computer network is maintained and managed by competent and qualified staff

Activities:

to train 2 staff members of the computer centre up to X level

As a result of the sustainability check in terms of the intervention logic, it became clear that given the ongoing advancements in terms of information technology, there is a need to ensure continuous training of the staff involved in order to ensure the sustainability of the services i.e. proper management of the computer network. As a result the activity underneath was added. Alternatively, it could have been incorporated as an assumption with regard to the partner university.

'to ensure that a sustainable and ongoing training programme for staff of the computer centre is in place'

(2) How to assess overall sustainability?

1. Ownership by beneficiaries: What evidence is there that all beneficiaries (academic and administrative staff, students), support the project? How actively are and will they be involved/consulted in project preparation and implementation? How far do they agree and commit themselves to achieving the objectives of the project? To what extent are they willing to commit resources and internal policy reviews to ensure its success (in particular relevant for institutional capacity building.)
2. Policy support: Is there a comprehensive institutional plan at the university or departmental level that ensures that the intervention is imbedded in a wider strategy? Is there evidence of sufficient support by the responsible authorities (internal by management or external by policy makers) to put in place the necessary supporting policies and resource allocations (human, financial, material) during and following implementation?
3. Appropriate technology: Is there sufficient evidence that the chosen technologies can be used at affordable cost and within the local conditions and capabilities of all types of users, during and after implementation? In particular, can such technologies by technically sustained and integrated in the functioning of the required levels? Are they appropriate in view of the overall technical development and infrastructure of the recipient?
4. Environmental protection: Have harmful environmental effects which may result from use of project infrastructure or services been adequately identified? Have measures been taken to ensure that any harmful effects are mitigated during and after project implementation?
5. Socio-cultural issues: Does the project take into account local (institutional or societal) socio-cultural norms and attitudes? Will the project promote a more equitable distribution of access and benefits within the university but also at the level of the society (if applicable)?
6. Gender equality: Have sufficient measures been taken to ensure that the project will meet the needs and interests of both women and men? When scholarships and training opportunities are planned, have specific measures to encourage women been considered?
7. Institutional and management capacity: Is there sufficient evidence that the local department or other relevant university unit has the capacity and resources (human and financial) to manage the project effectively, and to continue service delivery in the longer term? If capacity is lacking, what measures have been incorporated to build capacity during project implementation?

3.4. COMPLETING THE LOGFRAME MATRIX

3.4.1. Step 1: How to identify indicators (OVIs) and sources of Verification (SOV)

Indicators (*Objectively Verifiable Indicators or OVIs)*)

Indicators describe the project's objectives in operationally measurable terms (quantity, quality, target group(s), time, place). Specifying OVIs helps checking the viability of objectives and forms the basis of the project monitoring system. OVIs should be measurable in a consistent way and at an acceptable cost. A good OVI should be SMART:

- S-pecific: measure what it is supposed to measure
- M-easurable
- A-vailable at an acceptable cost
- R-elevant with regard to the objective concerned
- T-ime-bound.

Often, the formulation of indicators is not an easy task. This might be the case in many UDC projects that pursue qualitative or intangible outputs. In such cases the definition of appropriate indicators may involve considerable interaction among stakeholders. It might be possible as well that more than one indicator will be needed to sufficiently describe a result or objective. It will not always be possible to find indicators that fulfil all these criteria. In that case, '*proxy-indicators'* might be resorted to.

> **_An example:_** *In the case of sorghum production, the indicator refers to a 5% increase that will be verified through reports of the institute. In case such yield monitoring reports would not already take place, it could be costly to obtain data on yields as a separate project activity. In such case, the indicator 'production increase' could be replaced by the proxy indicator 'sorghum availability at the market'. Data on availability of sorghum at the local markets is easier to monitor. However, the suitability of this proxy-indicator is dependent on a number of assumptions (excess production will be sold etc).*

It is not always feasible to formulate indicators at the level of the overall objectives. As stated above, the overall objectives refer to changes at the level of society to which the project intends to contribute. The indicators should refer to the specific '*contribution*' of the project to each of these general objectives. However, in most cases, the project's contribution is relatively small and, more importantly, difficult to isolate. It is then not meaningful to formulate indicators, and the corresponding cell can remain blank. Alternatively, indicators may be formulated without further operationalisation, i.e. without trying to measure the project's performance against them (the sources of verification cell to the right of the indicator will remain blank).

In addition, indicators should be independent of each other, each one relating to only one objective in the Intervention Logic, i.e. to one of the overall objectives, the specific objective or to one result. Often, it is necessary to establish several indicators for one objective,

> **_Remark_**_: The indicator will indicate the level of ambition of a certain project. It may aim for a increase in food production by 10% or 20%. This needs to be reviewed carefully in view of (1) what is realistically achievable i.e. the need to plan conservatively, and (2) how does the ambition relate to the cost? Ultimately, the project objective as measured by the indicator will be compared to the total project cost. This comparison could be used to appraise whether the project is worthwhile, henceforth the need to be ambitious to ensure funding._

Sources of verification (SOV)

Sources of verification are documents, reports and other sources providing information that make it possible to check the Indicators. When indicators are formulated, the source of verification should be specified at the same time. 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:

- 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 cost of collecting information to be produced by the project itself should also be estimated and adequate means provided. There is often a direct relationship between the complexity of the SOV (i.e. ease of data collection and analysis) and its cost. If an OVI is found too expensive or complicated to collect, it should be replaced by a simpler, cheaper and often indirect (proxy) OVI: e.g. instead of conducting a detailed survey on incomes of farm households, the changes of household expenditure may be assessed, e.g. sales of veterinary suppliers and pharmacies, or tools or household goods (clothes, energy saving stoves, etc.) might be counted.

Generally speaking, it is preferable to resort to so-called external sources of verification. These are sources that are external to the project (no danger for a bias that is '*favourable*' for the project and there are no additional costs involved for the project). However, most often this is not possible because the information is not reliable or specific enough and/or not timely). Hence, the project will most often be forced to define so-called '*internal*' sources of verification. In this case, the project will need to organise the collection and treatment of the necessary information.

How to Define OVIs and to Select SOV?

How to define OVIs?
1. Specify for each Result, the Specific objective, and the Overall Objectives:
• the quantity: how much?
• the quality: what?
• the target group: who?
• the time / period: starting when and for how long?
• the place: where?
Note: Indicators concerning the Overall Objectives tend to be more qualitative than those
applicable to the Specific objective and the Results, which have more quantitatively
measurable components.
2. Check whether the Indicators or Indicators describe the Overall Objectives, Specific
objective
or Results accurately. If not, other Indicators should be added or new ones found.
3. Care should be taken to ensure that the OVIs for the Specific objective - the project's
'centre of gravity' - do in practice incorporate the notion of 'sustainable benefits for the
target group'.

How to choose SOV?
1. Decide what Sources of Verification are needed to obtain the information on OVIs.
2. Identify which sources are to be collected, processed and kept within the project, and
which are outside (existing sources).
3. Check sources outside the project to ensure that:
(a) their form/presentation is appropriate;
(b) they are specific enough;
(c) they are reliable;
(d) they are accessible (where and when);
(e) the cost of obtaining the information is reasonable.
4. Replace OVIs for which no suitable sources can be found by others.

Use existing resources as much as possible to avoid additional cost, time and effort to be
deployed.

INDICATORS – AN EXAMPLE

Objective: Pollution load of wastewater discharged into the Blue river is reduced

Select the indicator: *Concentration of heavy metal compounds (PB, Cd, Hg)*

Define the targets:

Quantity: *Concentration of heavy metal compounds is reduced by 75% compared to year X levels…*
Quality: *…to meet the limits for irrigation water…*
Target group: *…used by the farmers of Blue village…*
Place: *…in the Blue river section of the District…*
Time: *…2 years after the project has started.*

3.4.2. Step 2: How to identify means and costs

The boxes '*Means*' and '*Cost*' replace OVIs and SOV at the level of activities. OVIs and SOV are thus not specified for activities in the Logframe, but may be specified later when preparing an activity Schedule (see section 4). Means are physical and non-physical resources (often referred to as "Inputs") that are necessary to carry out the planned Activities and manage the project. A distinction

can be drawn between: *human resources* and *material resources*. Cost are the translation into financial terms of all the identified resources (Means).

The activities should therefore be worked out sufficiently to enable estimates of the necessary physical and non-physical means. This will include the means and cost required for management support activities. An area for particular attention is the cost of collecting data on OVIs.

How to Establish Means and Cost?

1. Work out the human, material and financial means necessary to carry out the planned Activities
under each Result. Classify them according to the requirements of the co-operation mechanism (budgetlines).
2. Work out the human, material and financial means needed for management and support activities not included in the Logical Framework (e.g. building of a co-ordination office, administrative and accounting staff, etc.). For transparency reasons, you may just summarise all these activities as a reminder at the bottom of the logframe. You can then identify the means required and link them to the respective cost.
3. Calculate the cost of the resources thus established.
4. List a summary of Means in the 2nd column behind the activities in the Logical Framework and summarise the cost by budget origin in the 3rd column behind the Activities.

A COMPLETED LOGFRAME – AN EXAMPLE

PROJECT DESCRIPTION INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS (OVIs)	SOURCES OF VERIFICATION (SOV)	ASSUMPTIONS
Overall objectives • The sorghum production in region X has increased substantially as a result of the application of the recommendations developed by the institute (developmental objective – society level) • In terms of agriculture, the teaching and research capacity at university X has improved (academic objective – university level)	• after 5 years striga is effectively suppressed in 20% of the affected field in the project area • after 10 years X% of the farmers of the region increase their production with 5% by better control of striga • the spin-offs of the project in the training programme of the institute, the research publications, and the new research the institute is engaged in.	Statistics of extension services Reports of the institute .	
Specific objective • at the end of the project some feasible recommendations which can be applied by at least 25% of the farmers in the area and which can be taken up in the extension strategy of the country are formulated	• in Y4 a hand-out on how to deal with Striga is published and distributed to 200 extension workers and innovative farmers in region X	Hand-out Distribution list	Sorghum remains an important crop in the area grown by most farmers. Farmers are adopting the recommendations.
Results 1. the institute has a very good academic understanding of all factors related to infestation of striga 2. applied research is successfully implemented 3. the lab and other supportive services are functional	1. from Y2 onwards every year 1 publication according to international academic standards is published on striga infestation in a specialised journal 2.1. in Y3 and Y4 a contribution is held in an international workshop by lecturers of the partner university 2.2. the number of demonstrations, practical field research done according to scientific standards 3. from Y2 onwards the lab can execute the following tasks X1, X2…	publication reports reports reports of the lab	First research shows that striga can be suppressed by using the right level of fertilizers
Activities 1.1. to offer 3 lecturers of the department a post-graduate training 1.2. to arrange for visits of the Flemish promoter and the Flemish 1.3. researcher to the institute 1.4. to arrange for visits of the local partners to Flemish department 1.5. to equip the library with the newest publications on weed infestation and Striga 1.6. to equip the researchers with computers 1.7. to offer 3 scholarships for exchange with other institutes 1.8. to arrange for visiting lecturers at the university 1.9. to arrange for participation to three international workshops on striga 2.1. to elaborate a common research proposal and an operational plan to 2.2. execute the research program 3.1. to procure all the materials to implement the practical research 3.2. to equip the lab 3.3. to train personnel of the lab 3.4. to establish a revolving fund to buy the necessary products for the lab	means • scholarships 3x3years • travel 10 times Belgium-X • visiting lecturers (2x3X5 days) • investment books & computers • 4wd vehicle • allowances • equipment • training lab-technicians revolving fund lab	costs -500 000 -300 000 -200 000 -500 000 -1 200 000 -300 000 -200 000 -150 000 -150 000 _____ 3 500 000	Personnel turnover is limited

4. USING THE LOGICAL FRAMEWORK TO DEVELOP OPERATIONAL PLANS

4.1. Introduction

As the end of the formulation phase, the logical framework summarises the essential elements of the project:

- the objectives and the results the project aims at and the activities that will be undertaken (project logic);
- the external factors on the success of the project depends (assumptions);
- the operationalisation of the objectives in such a way that their implementation will be susceptible to future analysis (objectively verifiable indicators and verification instruments);
- the means necessary to implement the objectives and the cost of these means.

As such, the logical framework appears as the main planning document of a project. In spite of its importance, one should be aware that the logical framework does not contain all elements of a comprehensive plan. It defines the main features of the project, but it does not guarantee in itself an appropriate implementation of the project. In other words, the result of the formulation phase enables us to define a basis for the elaboration of the technical and operational aspects of a project. The concept of operational planning is therefore aimed at an efficient implementation of the planned project activities and concerns the following issue:

- a more detailed planning of the activities to be undertaken. These activities cover both content and management activities
- a detailed resource scheduling.

4.1. Components of operational planning

4.1.1. Detailed planning of 'content' activities

The activities defined during the formulation phase generally do not allow to appropriately implement the project. These activities often need to be detailed by defining '*sub-activities*' (contributing to the implementation of the activities, just like the activities contribute to the results). While over-planning needs to be avoided, the following items should generally be covered during operational planning:

- adequate timing of activities
- adequate division of tasks and responsibilities
- adequate estimation of means and a precise cost calculation

Therefore, Gantt charts are mostly used in this context (see example).

> **_Remarks_**_:_
> 1. _In most cases it is impossible to engage in operational planning for the full duration of the project. Furthermore, it is advisable to plan operational activities as close as possible to the actual starting date of the project. In case such as the OI where there can be a period of up to 9 months between formulation and actual implementation, the initial operational plan may have to be revised._

OPERATIONAL PLAN CONTENT ACTIVITIES – AN EXAMPLE

Description of activity	Year 1 (J F M A M J J A S O N D)	Year 2 (J F M A M J J A S O N D)	Budget Y1	Budget Y2	Resp. (North) Formal	Resp. (North) Implementing	Resp. (South) Formal	Resp. (South) Implementing
1, The institute has a very good understanding of all factors related to infestation of striga								
1.1. To offer 3 lecturers of the department a post-graduate			2500	980	Prom.			
1.1.1. Select lecturers					Prom		Prom.	
1.1.2. Identify appropriate post-graduate opportunities					Prom		Prom	
1.1.3. Formulate a study and research plan					Prom	Team	Prom	Team
etc.								
1.2. To arrange for visits of local partners to Flemish department			300	500				
1.2.1. Compose visiting delegation					Prom.	Assistant		
1.2.2. Agree on TOR for the visit					Prom.		Prom.	
1.2.3. Arrange logistics and programme						Secretary		Local
etc.								
Result 2								
2.1. *(Activity)*								
2.1.1. *(Subactivity)*								
2.1.2. *(Subactivity)*								
2.2. *(Activity)*								
2.2.1. *(Subactivity)*								

4.1.2. Detailed planning of 'management' activities

As the logical framework exclusively focuses on "content" activities, that is to say activities that are directly contributing to the attainment of the objectives, the success of a project will equally depend on those activities that ensure the proper management of the content activities with a view to guarantee efficiency and effectiveness in project implementation. In this respect we could distinguish between groups of management activities of which each deals with a specific aspect of the project:

▪ activities related to time management
▪ activities related to financial management
▪ activities related to the information process (within the project and between the project and its environment)
▪ activities related to the organisation of the project.

__Remark__: Following the introduction of PCM, by itself ensuring a proper project design, VLIR will attach increasing importance to the way project leaders have been managing and monitoring the process of project implementation. As such, the operational planning and in particular also the planning of management activities, will be an important factor in later evaluations of the project performance.

Time management

Planning of the time aspect (one often uses the word timing) concerns the decisions to be taken with regard to the time factor. The time factor comes to the fore with respect to decisions concerning the periods of implementation, the starting point of an activity and the question whether various activities will be (or can be) implemented simultaneously or not. This includes more specifically:

- timing of content activities (depending on the available means and the objectives to be attained)
- timing of other management activities (finance, information, ...).

This planning has to:

- fix the amount of time necessary for each activity and for the project as a whole
- relate the execution of the activities to the calendar (parallel with or following other activities)
- monitor the implementation of the activities according to the management cycle (see above).

With reference to the examples, the time factor can be outlined in a gantt chart.

Resource scheduling and financial planning

This includes financial planning of all activities costing money and/or generating an income.

Financial planning has to:

- define the total cost and income of the project
- define the cost and income of every (management and *'content'*) activity
- define the activities and procedures of the financial management (budget, bookkeeping, cash, ...)
- plan the liquid assets of the project (expenses and income related to the calendar).

While some of the above issues relate to setting up structures (setting up bookkeeping systems), others are of an ongoing nature requiring continuous monitoring. Resource planning can be undertaken in different manners. With reference to the examples related to operational planning, activity based budgeting is a simple way to ensure proper financial planning. Ultimately activities generate costs at a certain time, and as such form the basis of an operational budget.

In most cases, donors such as VLIR are compelled to utilise budget lines that by themselves have no reference to actual activities. Henceforth, the advise to add budgetary references to the operational planning at content and management level for each single activity (see example operational planning).

> **Remark**:
> 1. In the past, financial management was often based on input financing. In view of the objective oriented intervention logic (activities generating results etc.), this logic should also be observed in financial terms. Obviously, not all expenses can be linked to specific activities (personnel, co-ordination for example can be cross cutting). However, when the personnel component is considerable this could be considered in terms of assigning person months to content and/or management activities.
> 2. In the OI and IUC formats both a budgetline budget, and activity based budget are called for. The reference to the budgetlines is mostly relevant for DGIC reporting, while the activity based budget is directed to the financing of the intervention logic based on the identified activities.

Planning of the information aspect

Planning of the information aspect is important, within the project itself, as well as in the relation between the project and its environment:
- within the project itself, each member of the project generates information that has to be distributed towards others. At the same time, each one depends on the information of others
- the project should provide information (e.g. reports and programmes) to its environment and its development often depends on information to be provided by the outside world.

In this respect, planning of the information aspect concerns:
- planning of production and distribution (within and outside the project) of all necessary information concerning the activities of the project
- planning of the identification of the necessary external information and of the way to obtain it.

Information planning has to:
- define the information to be registered within the project
- fix the procedure of generation, distribution and filing of this information
- monitor the implementation of the information management activities according to the management cycle.

Remark: *In view of its complexity and fairly rigid framework (time and budget) internal communication has proven to be a particular challenge within the IUC partner programmes. As such, project leaders and IUC co-ordinators are particularly encouraged to address the need for timely communication at the different levels of project management in a planned manner.*

Structure and organisation of the project

In terms of the organisational aspects of the project, the project implementers need to

- provide a clear definition and division of tasks and responsibilities as well as define and maintain the communication procedures also in view of elaborating staff profiled for recruitment
- define and establish decision-making mechanisms
- take into account the motivation of the project team and the internal relations within this team (team-building)
- follow each one's performance within the project
- follow the implementation of the organisational activities according to the management cycle.

Projects in the field of development are often unique initiatives. In view of the existing working culture and structure, the nature of the project etc. a balance needs to be found between incorporating the project activities within existing structures and/or adding project specific structures such that the project objectives (sustainable benefits) can be attained.

Remarks:
1. As in other projects, VLIR in principle favours project structures that are part and parcel of the functioning of the local unit. In case the capacity is lacking in terms of timely (financial) reporting local capacity building is preferred over establishing parallel structures.
2. In particular, the practice of paying topping ups will in general be considered very critically as this constitutes a 'parallel remuneration structure'. A proper contextual analysis will ensure a realistic assessment of the possibilities in this regard.
3. Experience, especially in terms of the more complex IUC programme, has shown that given the rigidity in terms of funding (annual financing) and timeframe (annual programming) a continuous flow of information based on proper monitoring needs to be ensured such that timely correction can be ensured (see monitoring cycle). Therefore the following issues must be considered when outlining the information (management) plan:
3.1. planning of production and distribution (within and outside the project) of all necessary information concerning the activities of the project
3.2. planning of the identification of the necessary external information and of the way to obtain it
3.3. proper monitoring of the implementation of the information management activities according to the management cycle

OPERATIONAL PLAN MANAGEMENT ACTIVITIES – AN EXAMPLE

Description of activity	Year 1 J F M A M J J A S O N D	Year 2 J F M A M J J A S O N D	Budget Y1	Y2	Resp. (North) Formal	Implementing	Resp. (South) Formal	Implementing
1. Reporting and communication								
1.1. Financial reporting								
1.1.1. Collect and reconcile data					Project leader	Admin/Finance	Project leader	Admin/Finance
1.1.2. Draft annual report South							Project leader	Admin/Finance
1.1.3. Draft annual report North					Project leader	Admin/Finance		
1.2.4. Consolidation report					Project leader	Admin/Finance	Project leader	Admin/Finance
1.2.5. Prepare for internal audit			150	150			Project leader	Admin/Finance
1.2. Ensure systematic communication								
1.2.1. Compose editorial team newsletter								
1.2.2. Compile list of addressees					Project leader	Project team		Project team
1.2.3. Collect information for issue 1					Project leader	Project team	Project leader	Project team
etc.								
2. Project review and monitoring								
2.1. Review workshop								
2.1.1. Agree on participants and logistics					Project leader		Project leader	
2.1.2. Undertake preparatory arrangements (invitations, renting hall, producing materials etc)			80	120			Project leader	Assistant
2.2. (Activity)								
2.2.1. (Subactivity)								

4.2. Operational planning for better monitoring

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                    IMPLEMENTA-
                        TION


  ADJUSTMENT&                              OBSERVATION
  RE-PLANNING


                    COMPARISON
                    WITH NORM
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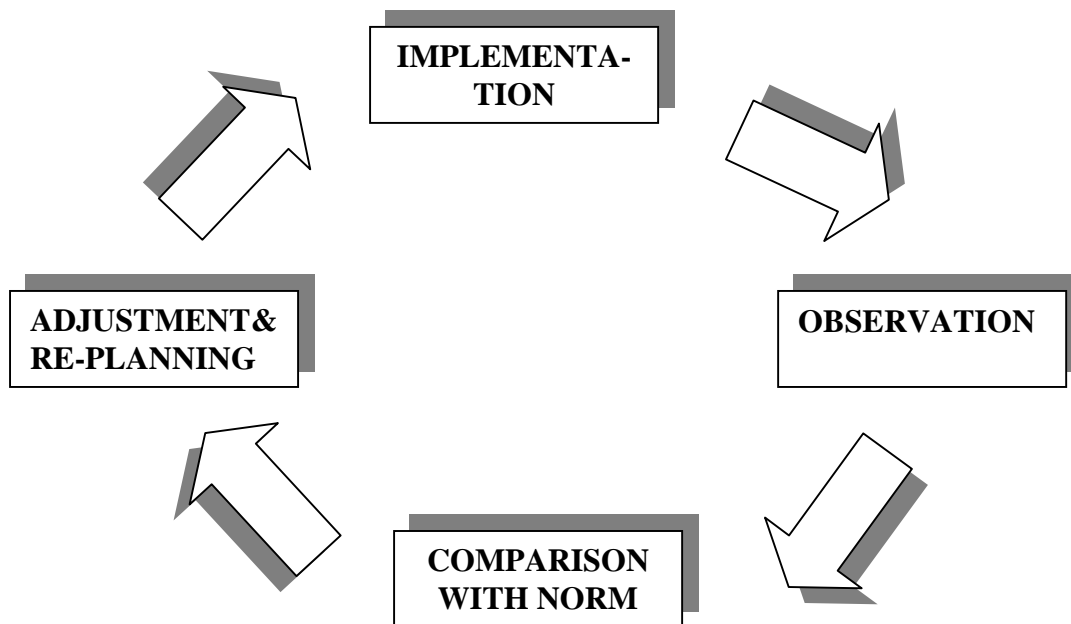
As outlined, the above cycle depicts the principle aspects related to monitoring both the content and management activities:

- implementation of an activity
- observation of the actual situation (concerning the management aspect or aspects in question); what has been attained?
- comparison with what had to be attained (according to the planning); what are the differences between reality and the norms
- the adjustment or the re-planning resulting from the outcome of the previous step:
  o no changes are needed
  o adjust (try to introduce changes so that the norms are respected in the future),
  o replan (change of norm (the plan) aiming at a better correspondence with reality)
  o stop the project

Not changing the plan is always to be preferred (the norm). If this would not be the case, one continuously risks to run after reality and finally to lose sight of the objectives of the project. Hence the importance of foreseeing, during the planning of the project, margins for each of the norms. Besides, the more rigidly one fixes the norm with respect to one aspect, the more sufficiently large margins are needed to define the norms with respect to the other aspects.

> **Example**: If the objectives of a project definitely have to be attained before a certain deadline (rigid norm with respect to the management aspect "time"), enough margins have to be provided for the other management aspects (e.g. a budget which is sufficiently large and/or quality requirements which are relatively limited).

MONITORING MANAGEMENT ACTIVITIES – AN EXAMPLE

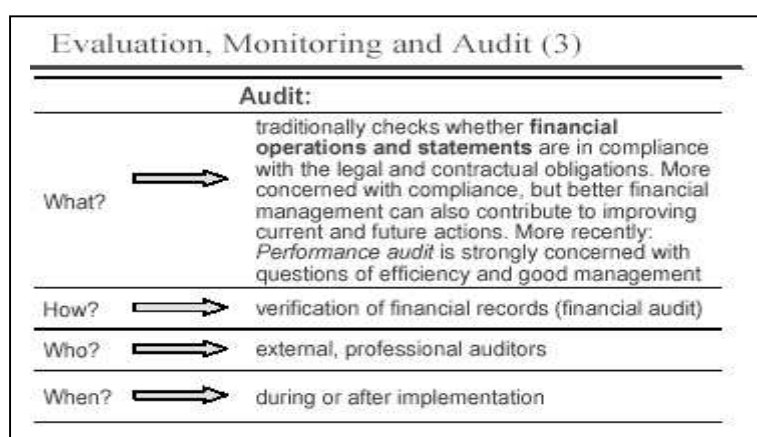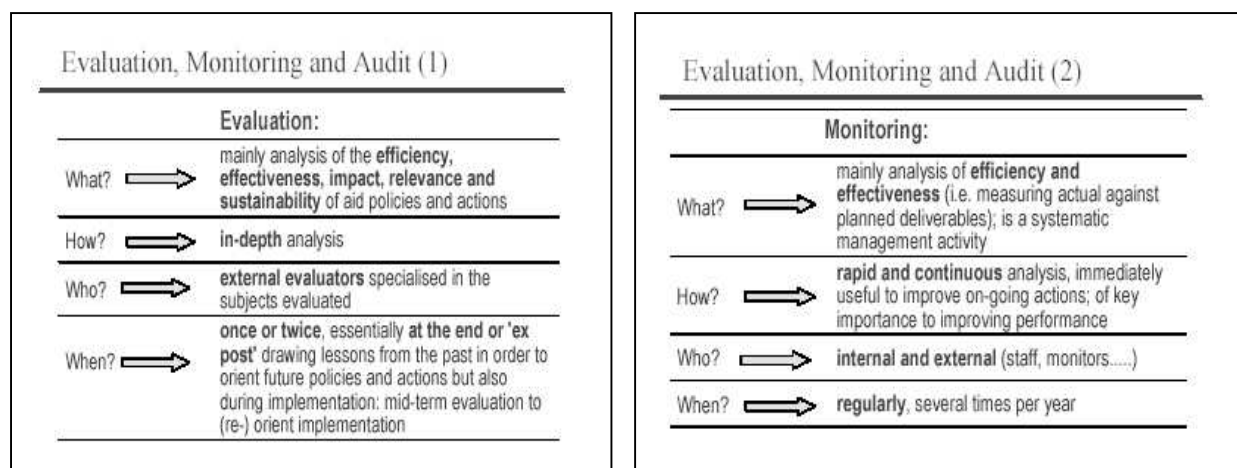| Description of activity	PLANNING Year 1 (J F M A M J J A S O N D)	Budget Y1	Budget Y2	Resp. (North) Formal	Resp. (North) Implementing	Resp. (South) Formal	Resp. (South) Implementing	Actual budget	Observation/Analysis	Recommendation/Corrective measures taken
1. Reporting and communication										
1.1. Financial reporting										
1.1.1. Collect and reconcile data				Project leader	Admin/Finance	Project leader	Admin/Finance		Delayed, finan. Depart. Incapable of reconciliation at level partner	Meeting conducted to elaborate internal guidelines
1.1.2. Draft annual report South				Project leader	Admin/Finance		Admin/Finance		Figures north and south did not match	Monthly exchanges of expenditure
1.1.3. Draft annual report North				Project leader	Admin/Finance					
1.2.4. Consolidation report				Project leader	Admin/Finance	Project leader	Admin/Finance			
1.2.5. Prepare for internal audit		150	150			Project leader	Admin/Finance	100	Difficult to obtain quotations	Start earlier with inviting quotations
1.2. Ensure systematic communication										
1.2.1. Compose editorial team newsletter				Project leader	Project team				Agreement on purpose and scope of newsletter took time	
1.2.2. Compile list of addressees					Project team				Delayed because of 121	Ongoing updating of database
1.2.3. Collect information for issue 1				Project leader	Project team	Project leader	Project team		Needs intensive follow up to ensure contributions	Agree early in the year on the production of articles
etc.										
2. Project review and monitoring										
2.1. Review workshop										
2.1.1. Agree on participants and logistics				Project leader		Project leader			Difficult to find a convenient timing	Confirm timing early enough
2.1.2. Undertake preparatory arrangements (invitations, renting hall, producing materials etc)		80	120	Project leader		Project leader	Assistant	130	Delayed because of 211	
2.2. (Activity)										
2.2.1. (Subactivity)										

5. PROPER PLANNING, EFFECTIVE EVALUATION

5.1. Some evaluation concepts

An evaluation is an assessment, as systematic and objective as possible, of an on-going or completed project, its design, implementation and results. An evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned into decision-making processes of both VLIR and its partners who are the 'project owners'. While evaluations are therefore meant to improve (1) decision making, (2) resource allocation and (3) accountability, 'learning' is really the core agenda. Within VLIR, evaluation will therefore be understood not as an intervention to judge the partners, but rather as an opportunity for mutual learning.

Depending on the timing of the evaluation the following evaluation types can be distinguished :
- Mid-term evaluation: Such interim evaluation are usually undertaken at mid-term of an ongoing evaluation to review progress and propose alterations to project design during the remaining period of implementation
- Final or end-of-project evaluation: The objective is to document the resources used, results and progress towards objectives. The objective is to generate lessons about the project which can be used to improve future designs
- An ex post evaluation: Such an evaluation is conducted several years after completion of the project and often focuses on impact. Such an impact (or lack of it) will also indicate to what extent the project results have proven to be sustainable.

Often, there is confusion about the difference between what monitoring, evaluation and audit. As outlined underneath, each has its own objectives and all should be de-linked from each other.

Evaluation, Monitoring and Audit (1)

Evaluation:

What? ⟹	mainly analysis of the **efficiency, effectiveness, impact, relevance and sustainability** of aid policies and actions
How? ⟹	**in-depth** analysis
Who? ⟹	**external evaluators** specialised in the subjects evaluated
When? ⟹	**once or twice**, essentially **at the end or 'ex post'** drawing lessons from the past in order to orient future policies and actions but also during implementation: mid-term evaluation to (re-) orient implementation

Evaluation, Monitoring and Audit (2)

Monitoring:

What? ⟹	mainly analysis of **efficiency and effectiveness** (i.e. measuring actual against planned deliverables); is a systematic management activity
How? ⟹	**rapid and continuous** analysis, immediately useful to improve on-going actions; of key importance to improving performance
Who? ⟹	**internal and external** (staff, monitors.....)
When? ⟹	**regularly**, several times per year

Evaluation, Monitoring and Audit (3)

Audit:

|	
What? ⟹	traditionally checks whether **financial operations and statements** are in compliance with the legal and contractual obligations. More concerned with compliance, but better financial management can also contribute to improving current and future actions. More recently: *Performance audit* is strongly concerned with questions of efficiency and good management
How? ⟹	verification of financial records (financial audit)
Who? ⟹	external, professional auditors
When? ⟹	during or after implementation

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5.2. Evaluation criteria and their link to the logframe

Recently VLIR has gained considerable experience in terms of evaluation in particular as regards the IUC partner programmes. As such, it has proven that in the absence of a proper design, applying evaluation criteria becomes very difficult. The 5 principal evaluation criteria that are normally applied during evaluations, indeed are closely linked to the logframe matrix. Being a summary of the project design, a poor logframe will therefore not enable a proper evaluation.

As presented in the underneath figure, these criteria can be defined as follows:

Relevance: The appropriateness of project objectives to the problems that it was supposed to address, and to the physical and policy environment within which it operated, and including an assessment of the quality of project preparation and design – i.e. the logic and completeness of the project planning process, and the internal logic and coherence of the project design.

Efficiency: The fact that the results have been achieved at reasonable cost, i.e. how well inputs/means have been converted into Results, in terms of quality, quantity and time, and the quality of the results achieved. This generally requires comparing alternative approaches to achieving the same outputs, to see whether the most efficient process has been adopted.

Effectiveness: An assessment of the contribution made by results to achievement of the specific objective, and how assumptions have affected project achievements.

Impact: The effect of the project on its wider environment, and its contribution to the wider academic and developmental objectives summarised in the project's overall objectives, and on the achievement of the overarching policy objectives of VLIR.

Sustainability: An assessment of the likelihood of benefits produced by the project to continue to flow after external funding has ended, and with particular reference to factors of ownership by beneficiaries, policy support, economic and financial factors, socio-cultural aspects, gender equality, appropriate technology, environmental aspects, and institutional and management capacity. In this regard the notion of self-reliance (to what extent will the partner university have the capacity to ensure continuation) has been put forward by VLIR.

LINKING EVALUATION CRITERIA TO THE LOGFRAME[8]

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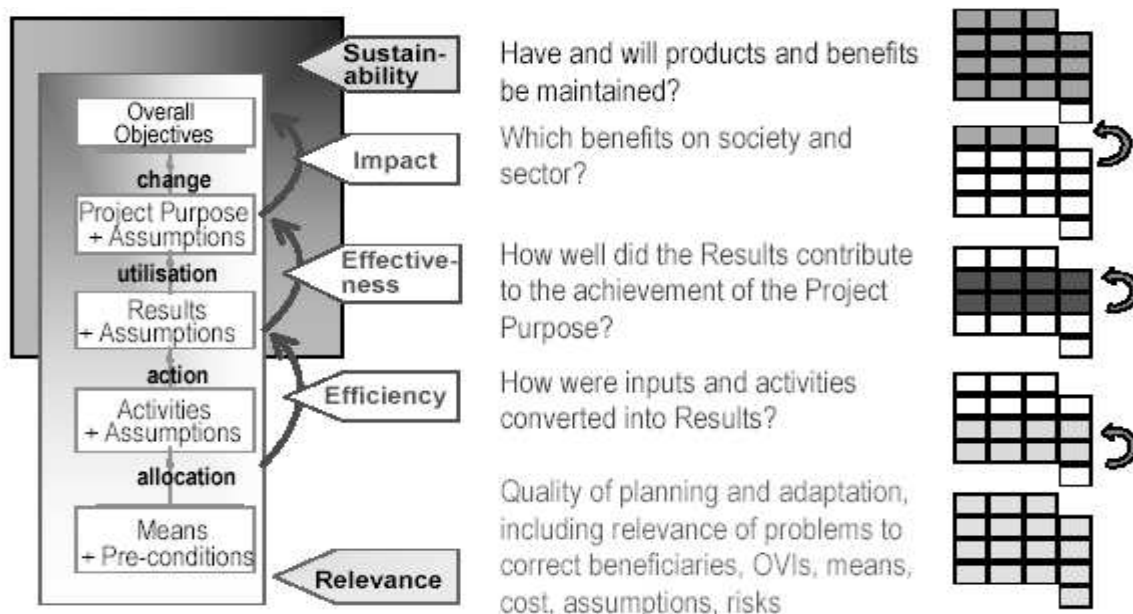
[8] Project purpose is here used for specific objective

In the context of the VLIR-UDC activities, and given its inherent complications and cost, impact evaluation will not be an immediate priority. However, given its specificity, the criterion of '*academic quality'* will be an additional important evaluation concern. While it cuts across the other criteria, it generally refers to the adoption of approaches and methods that are in line with relevant academic standards.

As can be seen from the figure, the project design as summarised by the logframe, represents the benchmark against which the evaluation can be conducted.

> **Remark**: *With reference to the definition of relevance, evaluations will also review the design of the project, including possible steps to adapt the project to changing circumstances. As such linkages are made to the quality in terms of managing the implementation phase. At the same time, however, each revision to the logframe will complicate final evaluations (the benchmark as presented by the logframe is shifting).*

6. GLOSSARY OF TERMS

ACTIVITIES	The actions (and means) that have to be taken / provided to produce the results. They summarise what will be undertaken by the project.
ACTIVITY SCHEDULE	The timing, sequence and duration of project activities. It can also be used to identifymilestones for monitoring progress, and to assign responsibility for achievement of milestones;
ANALYSIS OF OBJECTIVES	Identification and verification of future desired benefits to which the beneficiaries attach priority. The output of an analysis of objectives is the objective tree / hierarchy of objectives.
ANALYSIS OF STRATEGIES	Critical assessment of the alternative ways of achieving objectives, and selectionof one or more for inclusion in the proposed project.
ASSUMPTIONS	External factors which could affect the progress or success of the project, but over which the project manager has no direct control. They form the 4th column of the logframe, and are formulated in a positive way, e.g.: "Reform of penal procedures successfully implemented".
BAR CHART	Visual presentation of timeline (also see gantt chart)
DIRECT BENEFICIARIES	Direct beneficiaries are those groups (the target groups) that are directly targeted to enjoy the benefits from the services provided by the project (at the level of the specific objective). In terms of its effectiveness the project will be held accountable in terms of measurable benefits to direct beneficiaries.
INDIRECT BENEFICIARIES	Indirect beneficiaries are those groups that intend to enjoy benefits at the level of the overall objectives. As the project will only make a contribution to the attainment of the overall objectives, such groups are indirect beneficiaries only.
COST	Costs are the translation into financial terms of all the identified resources ("Means").
DELIVERABLES	Tangible outputs that they project has to produces at certain stages. They can be used as process indicators at activity and/or result level.
EFFECTIVENESS	An assessment of the contribution made by results to achievement of the project purpose, and how Assumptions have affected project achievements.
EFFICIENCY	The fact that the results were obtained at reasonable cost, i.e. how well have Means and Activities been converted into Results, and the quality of the results achieved.
EVALUATION	A periodic assessment of the efficiency, effectiveness, impact, sustainability and relevance of a project in the context of stated objectives. It is usually undertaken as an independent examination of the background, objectives, results, activities and means deployed, with a view to drawing lessons that may guide future decision-making.
FEASABILITY	Addresses the issue whether the Specific objectives can be really achieved.
FORMULATION PHASE	The third phase in the project cycle. It involves the establishment of the details of the project according to the prescribed formats that will allow a full assessment by the OI or IUC commissions.
GANTT CHART	A method of presenting information graphically, often used for activity scheduling. Similar to a bar chart.

GENDER	The social differences that are ascribed to and learned by women and men, and that vary over time and from one society or group to another. Gender differs from sex, which refers to the biologically determined differences between women and men.
HIERARCHY OF OBJECTIVES	A diagrammatic representation of the proposed project interventions planned logically, following a problem analysis, showing a means to ends relationship.
IDENTIFICATION PHASE	The second phase of the project cycle. It involves the initial elaboration of the project idea in terms of objectives, results and activities, with a view to determining whether or not to go ahead with a feasibility study.
IMPACT	The effect of the project on its wider environment, and its contribution to the wider to the project's overall objectives, and on the achievement of the overarching policy objectives of the VLIR.
IMPLEMENTATION PHASE	The phase of the project cycle during which the project is implemented, and progress towards achieving objectives is monitored.
INPUTS	See "Means".
INTERVENTION LOGIC	The strategy underlying the project. It is the narrative description of the project at each of the four levels of the 'hierarchy of objectives' used in the logframe.
LOGFRAME	The matrix in which a project's intervention logic, assumptions, objectively verifiable indicators and sources of verification are presented.
LOGICAL FRAMEWORK APPROACH	A methodology for planning, managing and evaluating programmes and projects, involving stakeholder analysis, problem analysis, analysis of objectives, analysis of strategies, preparation of the logframe matrix and activity and resource schedules.
MEANS	The boxes 'Means' and 'Costs' replace OVIs and SOV at the level of activities. Means are physical and non-physical resources (often referred to as "Inputs") that are necessary to carry out the planned activities and manage the project. A distinction can be drawn between: human resources and material resources.
MILESTONES	A type of OVI providing indications for short and medium -term objectives (usually activities) which facilitate measurement of achievements throughout a project rather than just at the end. They also indicate times when decisions should be made or action should be finished.
MONITORING	The systematic and continuous collecting, analysis and using of information for the purpose of management and decision-making.
OBJECTIVE	Description of the aim of a project or programme. In its generic sense it refers to activities, results, project purpose and overall objectives.
OBJECTIVE TREE	A diagrammatic representation of the situation in the future once problems have been remedied, following a problem analysis, and showing a means to ends relationship.
OBJECTIVELY VERIFIABLE INDICATORS	Measurable indicators that will show whether or not objectives have been achieved at the three highest levels of the logframe. OVIs provide the basis for designing an appropriate monitoring system.
OVERALL ACADEMIC OBJECTIVE	The contribution that the project will make towards the functioning of the university as such.
OVERALL	They explain why the project is important to society (developmental overall

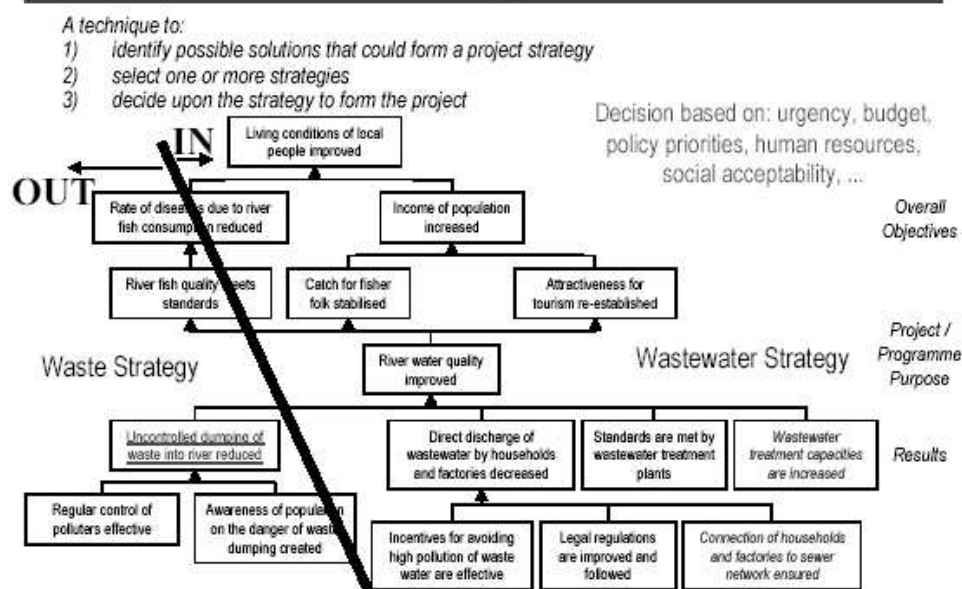| DEVELOPMENTAL OBJECTIVE	objective) or partner university (academic overall objective), in terms of the longer term benefits to final beneficiaries and the wider benefits to other groups. The Overall Objectives will not be achieved by the project alone (it will only provide a contribution to the achievement of the overall objectives), but will require the contributions of other non-VLIR programmes and projects as well.
PRE CONDITIONS	Conditions that have to be met before the project can commence, i.e. start with activities. Pre-conditions (if any) are attached to the provision of aid.
PROBLEM ANALYSIS	A structured investigation of the negative aspects of a situation in order to establish causes and their effects.
PROBLEM TREE	A diagrammatic representation of a negative situation, showing a cause-effect relationship.
PROGRAMME	Generally, a series of projects with a common overall objective. In VLIR-UDC programme may refer to a IUC partner programme or the overall OI or IUC programme.
PROJECT	A series of activities with set objectives, designed to produce a specific outcome within a limited time frame.
PROJECT CYCLE	The project cycle follows the life of a project from the initial idea through to its completion. It provides a structure to ensure that stakeholders are consulted, and defines the key decisions, information requirements and responsibilities at each phase so that informed decisions can be made at each phase in the life of a project. It draws on evaluation to build the lessons of experience into the design of future programmes and projects.
PROJECT CYCLE MANAGEMENT	A methodology for the preparation, implementation and evaluation of projects and programmes based on the integrated approach and the logical framework approach.
SPECIFIC OBJECTIVE	The central objective of the project. The specific objective should address the core problem, and be defined in terms of sustainable benefits for the target group(s). The specific objective should also express the equitable benefits for women and men among the targeted direct beneficiaries. There should ideally only be one specifi objective per project.
QUALITY	Quality may be used in terms of sustainability. In the context of the VLIR-UDC interventions however, it refers to the degree to which the projects adopts approaches and methods that are in line with relevant academic standards.
DEVELOPMENTAL RELEVANCE	The appropriateness of the specific objective to the real problems, needs and priorities of the intended indirect beneficiaries that the project is supposed to address at the level of the society, and to the physical and policy environment within which it operates.
ACADEMIC RELEVANCE	The appropriateness of the specific objective to the real problems, needs and priorities of the university in terms of its functioning and the manner in which it can cope with its responsibilities in society.
RESOURCE SCHEDULE	A breakdown of the project budget where means and costs are linked to activities, and detailed per time period selected.
RESULTS	The "products" of the activities undertaken, the combination of which achieve the specific objective of the project, namely a start of enjoyment of sustainable benefits for the target groups.
RISKS	See also "Assumptions". External factors and events that could affect the

	progress or success of the project, and that are not very likely to hold true. They are formulated in a negative way, e.g.: "Reform of penal procedures fails".
SOURCES OF VERIFICATION	They form the third column of the logframe and indicate where and in what form information on the achievement of the overall Objectives, the specific objective and the results can be found (described by the objectively verifiable indicators).
STAKEHOLDER ANALYSIS	Stakeholder analysis involves the identification of all stakeholder groups likely to be affected (either positively or negatively) by the proposed intervention, the identification and analysis of their interests, problems, potentials, etc. The conclusions of this analysis are then integrated into the project design.
STAKEHOLDERS	Any individuals, groups of people, institutions or firms that may have a relationship with the project are defined as stakeholders. They may – directly or indirectly, positively or negatively – affect or be affected by the process and the outcomes of projects or programmes. Usually, different subgroups have to be considered.
SUSTAINABILITY	The likelihood of a continuation in the stream of benefits produced by the project after the period of external support has ended.

RIVER WATER QUALITY EXAMPLE (EU Manual)

Analysis of Strategies

A technique to:
1) identify possible solutions that could form a project strategy
2) select one or more strategies
3) decide upon the strategy to form the project

Decision based on: urgency, budget, policy priorities, human resources, social acceptability, ...

Building the Logframe: A Completed Logframe

	Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions
Overall Objectives	Living conditions of local people improved	•The income generated by the catch of y-fish is increased by 30 % by 2003 •Tourism revenues increased by 30% by 2004	•Socio-economic Survey report of the Ministry of Economic affairs	
Project/ Programme Purpose	River water quality improved	•Rate of diseases due to river fish consumption reduced by 80 % until 2003 •Catch of y-fish is increased by 20% until 2002, while maintaining stock level	•Regional hospital and medical statistics •Reports of River authority and co-operatives	•Market demand for y-fish remains at least stable •Tourists are informed about the improved situation
Results	1. Direct discharge of wastewater by households and factories decreased	•70 % of wastewater produced by factories and 80% of wastewater produced by households is treated in plants by 2002	Survey report of Municipalities	•Upstream water quality remains stable •Uncontrolled dumping of waste into river remains at least stable
Activities	1.1 Analyse environmental investments of companies 1.2 Identify relevant clean technologies 1.3 Design incentives 1.4 Test and adapt incentives 1.5 Provide incentives 1.6 Launch improvement of legal regulations and monitor their effectiveness 1.7 Connect households and factories 1.8 Raise awareness of households and industry concerning impact of wastewater 1.9 Train municipalities in maintenance of wastewater system	Means A: Technical expertise, 20 PM B: Investment C: Maintenance D: ... Total	Cost ('000 €) EC Gvt Other Total 400 400 1000 400 200 1600 3000 1000 600 4600	Use of sewerage systems socially acceptable Construction permission obtained

Pre-conditions

Feeder Roads Project: Selection of Strategies
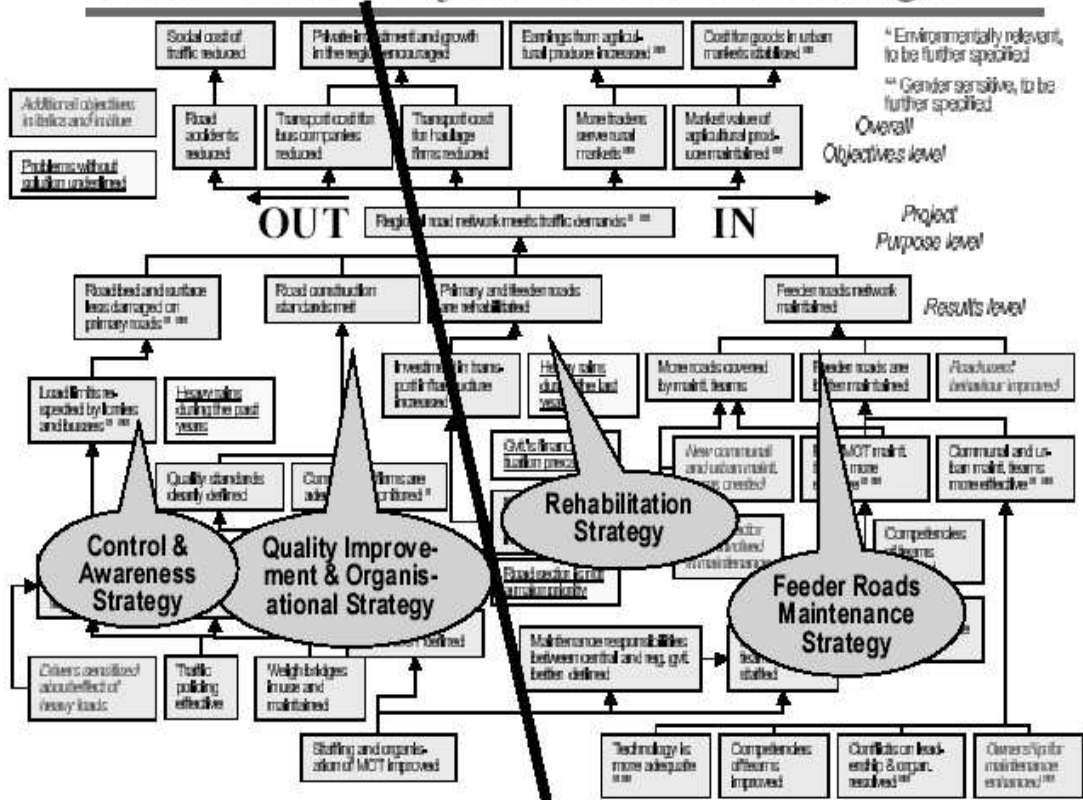
Feeder Roads Project: Building the Logframe: Completed Logframe

	Intervention Logic	Objectively Verifiable Indicators		Sources of Verification	Assumptions
Overall Objectives	Supply of urban markets, with agricultural produce from the region stabilised	Total number and scale of supplies for perishable produce to urban areas increased by 15% by 2015 Total number of small scale supplies for perishable produce to urban areas at least maintained by 2015		Regional market statistics	
	Region's competitiveness on national & international markets improved	Quantity of agricultural exports from the region increased from X to Y tons by 2015		Regional export statistics	
Project Purpose	Feeder roads network meets traffic demand	By 2010, average journey time from any point within the rehabilitated or maintained feeder road network to the next primary road section reduced: - by 15% for traders - by 20% for female drivers on private vehicles, and - by 15% for male drivers on private vehicles		User survey reports 2001 and 2010	• Primary road network rehabilitated & maintained • Interest in products from region at least stable • Road construction firms are adequately monitored
		By 2010, losses of market value of agricultural produce during transport to urban markets reduced by 20% for export crops and by 30% for perishable crops of female producers		Market surveys	
Results	1. Feeder roads are rehabilitated	Priority feeder roads rehabilitated to the MOT approved standards: 400 km by 2007, 1000 km by 2009		End-of-rehabilitation/construction reports MOT road condition survey reports	
	2. Quality of feeder roads network is increased	By 2005, 40% of the feeder roads are maintained when required, to the MOT approved standards, out of which a minimum of 40% by communal and urban teams, and a minimum of 10% by private enterprises By 2008 and beyond, 90% of the feeder roads are maintained when required, to the MOT approved standards, out of which a minimum of 55% by communal and urban teams, and a minimum of 20% by private enterprises		MOT road condition survey reports, Contracts with private enterprises, Reports MOT, Regional and District Offices	Load limits are respected by lorries and busses
	3. Performance of Regional MOT improved	Quality standards for rehabilitation and maintenance of roads are verified at least once during works and at the end of the works from 2004 onwards Regional sector planning and annual budgeting done to the standard required by MOPF, and within the time framework set, from 2004 onwards		Regional MOT field monitoring reports, Correspondence with MOPF (regional and national), minutes of meetings with MOPF	

	Activities	**Means**		**Costs (M)**			
				EC	O/L	Total	
	1.1 Identify priority feeder roads to rehabilitate	Human resources (expertise inc maintenance, road funds, etc.)	160 PM	2.7		2.7	
	1.2 Monitor road rehabilitation, including shelter, lighting, telephones and road safety measures where appropriate	Investment (vehicles, equipment, houses, offices, etc.)		1.5	0.2	1.7	
	1.3 Improve collection of road tolls and taxes	Maintenance	120 months	2.0	1.0	3.0	
	1.4 Devise and apply system for reinvestment	Office running	120 months	1.0	0.5	1.5	
	2.1 Review and improve approach to maintenance	Working capital		1.0	0.2	1.2	
	2.2 Increase competences of all types of maintenance teams (e.g. MOT, communal and urban) (training, equipment, monitoring, planning, environment, etc.)	Contingencies	10%	0.8	0.2	1.0	
	2.3 Improve and adapt technology to working conditions	Total		9.0	2.1	11.1	
	2.4 Involve private sector more in maintenance						
	2.5 Initiate creation of new maintenance teams						
	2.6 Enhance teams' ownership for maintenance						
	2.7 Support organisational adjustments of maintenance teams						
	2.8 Monitor and support all types of maintenance works						
	2.9 Increase ownership of feeder roads by all types of users (traders, men, women, etc.), including sensitisation on improved driving behaviour, environment, etc.						
	2.10 Enhance gender equality in maintenance teams and in decision making						
	3.1 Improve organisational set-up of Regional MOT including allocation of responsibilities						
	3.2 Apply quality control system						
	3.3 Train relevant staff in: planning, management, maintenance, road fund management, environment, etc.						
	3.4 Ensure gender equality in staff employment, training and promotion						
	3.5 Sensitise stakeholders on environment, passenger and vehicle safety, etc.						
	3.6 Implement EIA as required						
	3.7 Manage revenues from user charges						
	3.8 Co-ordinate regularly with other relevant ministries (in the region), communes, traffic police, donors, etc.						
				Pre-conditions			1. Quality standards for feeder roads are set 2. Sector policy framework clear, including maintenance responsibilities

ANNEX 2 - SELECTED REFERENCES[9]

Title	Author
Quality Management of Development Cooperation, Parts I, II & III	UNIDO, Vienna, 1997
Management and Development	RVB Research Papers, Vol XIV, Number 1, June 1994
Participatory Learning & Action, A trainer's guide	Jules N Pretty, Irene Gutt et al., International Institute for Environment and Development. London, 1995.
The Facilitator's field book	Tom Justice & David W. Jamieson, AMACOM, USA, 1999.
Projectmatig Werken	G Wijnen, W. Renes, P. Storm, Marka, Utrecht, 1989.
The Logical Framework Approach – A planning tool for Red Cross/Red Crescent Societies	Regional Delegation Kuala Lumpur Health Department, Health Series No. 1 Annex.
Planning Development Projects	G.A. Bridger & J.T. Winpenny, Crown, UK, 1983.
Effects or Impacts? Synthesis study on Evaluations and Reviews 1988 to Mid- 1995	Ministry of Foreign Affairs, Helsinki, Finland, 1996.
Manual – Project Cycle Management – Integrated Approach and Logical Framework	EC, Evaluation Unit Methods and Instruments for PCM Brussels, Number 1, February 1993.
Development Cooperation Policy in the run – up to 2000 - Collection of communications from the Commission to the Council and the European Parliament and of relevant resolutions, declarations and conclusions of the Council of Ministers	European Commission, DG VIII, Directorate A, Brussels, 1996.
Evaluating EU Expenditure Programmes – A Guide – *Ex Post* and Intermediate evaluation	European Commission, First Edition, Juanuary 1997.
The Rise and Fall of strategic planning	Henry Mintzberg, Prentice Hall, London, 1994.
Guidelines for Project Preparation	Danida, Denmark, January 1992.
Manual – Project Cycle Management	European Commission Europe Aid Co-operation Office, General Affairs, Evaluation, March 2001.

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[9] This list of references has been obtained from the PCM Manual compiled by the Project Cycle Management Group

Cost-benefit Analysis and Project Appraisal in Developing Countries	C. Kirkpatrick and J. Weiss, Edward Elgar, Cheltenham UK, 1996
Guidelines for Project Appraisal	A. Kuyvenhoven & L.B.M. Mennes, Government Printing Office, The Hague, 1985.
Systems Thinking, Systems Practice	Peter Chechkland, John Wiley & Sons, Chichester, 1981.
A guide to sector-wide approaches for health development	Andrew Cassels, World Health Organisation, 1997.
Guide to Practical Project Appraisal	United Nations, 1978, Oxford and IBH Publishing CO. New Delhi.
National Execution Manual for Viet Nam, Volume I (Identification, Formulation, Appraisal and Approval of Nationally Executed Projects) & Volume II (Implementation of Nationally Executed Projects)	Ministry of Planning and Investment Socialist Republic of Viet Nam & United Nations Development Programme, Version 2.0, September 1998.
Winning Through Participation	Laura J. Spencer, Kendall/Hunt Pub. Company, Iowa, 1989.
Basic Facts about the United Nations	United Nations, New York, 2000.
Participatory Rural Appraisal (Report from a PRA course in Mtwara, Tanzania)	FINNIDA, FAO/SIDA, FTTP, Box 7005, S-750 07, Uppsala, Sweden
Primer for the Metaplan Technique (How to moderate group discussions using the metaplan technique)	
Learning to take time and go slow: mainstreaming participation in development and the comprehensive development framework (CDF)	Operations Evaluation Department, World Bank, Institute of Development Studies, Sussex, 1999.
Doelgerichte Aktiviteiten Planning (DAP)	MDF, Orticonsult, B.V. Buro voor organisatie- en Opleidingsadvies
Manual for the use of "Objective-oriented Intervention Planning (OOIP)" at BADC	Belgian Administration for Development Co-operation (BADC), Brussels, March 1991, 2nd edition.
Evaluation of EU Development Aid to ALA States, Phase II – Field Study	EC, Service Commun Relex, Societa Italiana di Monitoraggio S.p.a., March 1999.
Guide Pratique de gestion des projets VIH/SIDA et Démographie en PVD	CD-ROM, European Commission, 2000.
ZOPP Objectives-oriented Project Planning	GTZ, unit 04, Eschborn, 1997.
Project Monitoring	GTZ, unit 04, Eschborn, 1997.
The Logical Framework Approach (LFA)	NORAD
The Logical Framework – a tool for the management of project planning and evaluation	J.D. McArthur, New series Discussion Papers no.42, DPPC, University of Bradford, 1993.
Origins, Integrated projects cycle management: roots and perspectives	Project Appraisal, Vol. 9, no. 1, March 1994.
Logical framework, Integrating the logical framework into the management of technical co-operation projects.	Cordingly D. in Project Appraisal, Vol. 1, 1995.
Logical Framwork – Clarifying the "logical framework" as a tool for planning and managing development projects	S. Wiggins and D. Shields, Project Appraisal Vol. 1, March 1995.

ANNEX 3 – SELECTED WEBSITES

- Manual Project Cycle Management, March 2001

European Commission / EuropeAid Co-operation office / General Affairs / Evaluation
http://europa.eu.int/comm/europeaid/evaluation/methods/PCM_Manual_EN-march2001.pdf

- PCM Handbook, March 2002

European Commission / EuropeAid Co-operation office / General Affairs / Evaluation
http://europa.eu.int/comm/europeaid/evaluation/methods/PCM_Train_Handbook_EN-March2002.pdf

- The ACP-EU Courier, No 169 - May-June 1998

69. PCM Revisited
http://europa.eu.int/comm/development/publicat/courier/index_169_en.htm

- PCM Homepage

by EuropeAid Co-operation office
http://europa.eu.int/comm/europeaid/evaluation/methods/pcm.htm

- Project Cycle Management (PCM)

Chapter 5: The application of the strategic approach entails identifying…
http://europa.eu.int/comm/development/publicat/water/en/acrobatformat/hy-02(05)079-092intro_en.pdf

- Powerpoint versie PCM

(The information in this presentation has been condensed from the Manual on Project Cycle Management: **Integrated Approach and Logical Framework, 1993)**
www.um.edu.mt/news/pcm.ppt

- Project Cycle Management (PCM), New Project Management Tools or Recycled Approaches from Yesterday?

by Holger Nauheimer
http://www.change-management-toolbook.com/pcm.htm

- PCM

by Process Consultants and Moderators
http://www.pcm-group.com/pcm.jsp

- ZOPP - OBJECTIVE ORIENTED PROJECT PLANNING, An introduction to the method

by German Technical Cooperation (GTZ)
http://www.unhabitat.org/cdrom/governance/html/yellop29.htm

- Beginner's Guide to Logical Framework Analysis

by BOND (British Overseas NGOs for Development)
http://www.bond.org.uk/lte/guidancenotes/logframes1.html

- Logical Framework Analysis (LFA)

By Office to Combat Desertification and Drought
http://www.undp.org/seed/unso/capacity/documents/lfa.pdf

ANNEX 4 – FREQUENTLY ASKED QUESTIONS
(to be completed)