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0. PREFACE

The Logical Framework Approach (LFA) is a tool – or rather an **open set of tools – for project design and management**. Its purpose is to provide a clear, rational framework for planning the envisioned activities and determining how to measure a project's success, while taking external factors into account.

At the request of the Global Environment Facility (GEF) Council, the Logical Framework (logframe) Approach is being adopted by all GEF projects since July 1997. Regardless of the Council's decision, LFA is not to be seen as a funding Agency requirement but as a real opportunity to further improve the quality of GEF projects.

Since that date, the German Foundation for international Development (DSE) has, in cooperation with the GEF Implementing Agencies (UNDP, World Bank, and UNEP), carried out various workshops on the introduction of the Logical Framework Approach (LFA) for project design. Within these workshops the DSE intended to introduce LFA as a participatory and flexible approach for project design in development cooperation.

One output of the workshops was the need for a complementary reader. The new reader is not, however, a description of LFA in general. It is offered as a resource book for GEF projects in particular. The LFA vocabulary has been adapted into the GEF context. Chapter 3 is dedicated specifically to the particularities of applying the LFA for project development and implementation in the GEF context.

The first part of the reader is dedicated as a theoretical introduction. In a second part (which is still to be developed) special GEF projects will be demonstrated as practical case studies.

The experiences in applying the LFA in various projects and the experience in a number of workshops showed the need to emphasize the idea that

the LFA is not a matrix, not a workshop, but an approach.

Our thanks go to the Federal Ministry of Economic Cooperation and Development (BMZ) for funding this reader and to the GEF Implementing Agencies that have contributed to this document with valuable suggestions and comments.

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Alan Walsch

1. INTRODUCTION

This first chapter of the Reader "Introduction to the Logical Framework Approach" gives a short overview of the background of the Logical Framework Approach (LFA): where it comes from and why it was introduced in development organisations. On that basis it will be explained what this reader intends to delineate, and how it is structured.

1.1. The Logical Framework Approach – a retrospective view

More than three decades have passed since the first introduction of the Logical Framework Approach (LFA) in a development organisation. Today it is being used widely and increasingly¹.

When U.S.A.I.D. – the United States Agency for International Development decided in the early 1970ies to introduce the Logical Framework it did so as a response to a number of problems encountered with project evaluations. These problems were²:

- **vague planning:** In general there was no clear picture of what a project would look like if it were successful – the objectives were multiple and not clearly related to the project activities;
- **unclear management responsibilities:** There were many important factors outside the control of project managers not stated as such (external factors), which made it difficult on the part of the project managers to accept responsibilities for outcomes;
- **evaluation as an adversary process:** In the absence of clear project targets evaluators tended to use their own judgement as to what they thought was "good" and "bad". Evaluation results would rather become the basis for arguments about what was desirable and undesirable instead of fostering constructive actions for project improvement.

Many years have passed since then. The LFA has been developed reflecting experience gained with development projects and with the application of the LFA itself and it has been adapted according to the specific policies and strategies of organisations. Whereas initially the LFA was rather a tool for a **standardized presentation** of projects (**descriptive** in nature), facilitating

¹ LFA is being used as a planning and management tool by itself or as an instrument forming part of Project Cycle Management (PCM). "ZOPP" or Objectives - Oriented Project Planning of the German Corporation for Technical Cooperation (GTZ) is very similar to the LFA.

² Practical Concepts Incorporated: The Logical Framework. A Manager's Guide to a Scientific Approach to Design and Evaluation. Sponsored by USAID. Washington, 1976, p.I-1. Also see: Solem, Richard Ray: The Logical Framework Approach to Project Design, Review and Evaluation in A.I.D.: Genesis, Impact, Problems and Opportunities. A.I.D. Working Paper No. 99, April 1987.

the decision-making procedure for those approving the projects in the 1970ies it became a tool for **improved design** of projects, turning more **analytical** in order to achieve more successful projects. In the 1980ies and 1990ies LFA expanded to become a tool for **improved project design and management**, maintaining its **analytical focus** but broadening it with **communication aspects**.³

The reasons for introducing the LFA have not changed considerably – one major driving force behind the introduction has almost always been the need to improve the effectiveness of projects. Although what is considered to be crucial to achieve effectiveness has changed in the light of experience. When for example the European Commission introduced LFA as a part of Project Cycle Management in the early 1990ies it did so on the basis of a review carried out on the effectiveness of its development work. The three key weaknesses identified then were the following⁴:

- that there was a general tendency to confuse the *project* with the *people* that were meant to profit from its implementation and functioning;
- in many cases, vitally important aspects were overlooked in project preparation, implementation and follow-up;
- too often, decisions were taken without being subject to the required decision-making discipline appropriate to each phase in the project cycle.

At the European Commission these weaknesses were translated into positive guiding principles⁵ forming the cornerstones of Project Cycle Management with the LFA being its principle project design and management tool.

Where the LFA drew its concepts from cannot be answered with a single source. It was probably a set of sources that inspired the development of the LFA. Corporate and military planning are cited as roots of the LFA, as well as, later on, science and experience gained from the management of complex space age programmes (e.g. early satellite launchings), introducing the formulation of hypothesis and their testing.⁶

³ Danida: Logical Framework Approach. A Flexible Tool for Participatory Development. February 1996, p.44.

⁴ Eggers, Hellmut W.: Project Cycle Management Revisited. In: the Courier, No. 169, May – June 1998, p. 69.

⁵ These guiding principles are: 1. Always express the project purpose (immediate objective) in terms of sustainable benefits for the target group; 2. Devise a “basic format” setting out concisely the vital aspects which, if not considered, will almost certainly lead to the project’s failure; 3. Devise a mechanism to guide sound decision-making throughout the project cycle. From: Eggers, Hellmut W., p.69.

⁶ Practical Concepts Incorporated, p. I-2.

Different institutions have different approaches to the LFA, emphasizing certain aspects that are of specific importance to their work. All these different approaches cannot be taken into consideration in this reader. References are made to publications that offer additional information.

What the LFA consists of and what its potentials and challenges are is explored in the following chapter.

1.2. About this Reader

This reader provides a theoretical introduction to the Logical Framework Approach. The LFA is presented as an open set of tools for project design and management to be complemented by other tools. The focus of the introduction though lies on explaining the LFA tools themselves and how they are related, shedding light on the rationale behind the LFA sequence. For the sake of clarity the presentation of complementary tools is not woven into the presentation of LFA tools. Possible complementary tools are mentioned in footnotes, indicating references for further reading on them. One exception to this division is made in the case of stakeholder analysis: As will be explained stakeholder analysis forms an integral part of the LFA but – as opposed to the other LFA tools - has not been interlinked methodologically with the LFA sequence. As there is no “official” LFA-tool for stakeholder analysis a number of possible tools for the analysis of stakeholders and the illustration of the findings are given.

The reader is designed as a theoretical basis to build on and hopefully make it a work in progress. For a start it explains what the LFA can be, and what it can't be (limitations) which is reflected in the reader's structure:

During the next chapter the LFA is laid out in its components and their interconnection. A “mini-case” in section 2.4 is used as an example for a project to illustrate the theoretical explanations.⁷ After having explained what the LFA actually is, or can be, at the end of the chapter limitations of the use and risks in the application of the LFA are pointed to.

Chapter 3 is dedicated specifically to the particularities of applying the LFA for project development and implementation in the GEF context, including a table that provides an idea on how and when the LFA tools can be applied throughout the project cycle

How does the application of the LFA for project design introduced **theoretically** translate into **practice**? How could the actual process of applying the LFA look like for project design in the GEF context? A sketch with a number of ideas on these questions is annexed to the theoretical introduction – the sketch is by no means comprehensive but should help to

⁷ LFA can equally used for programme design and management, which is not explicitly tackled in this reader. The proceeding is the same, but the **levels** of problems, objectives, etc. are different.

picture what the different “layers” of the project design process are, how they are connected and which role the LFA plays in this setting.

The applicability of the LFA is not limited to project design. It can also facilitate project management, interlinking the LFA with the different stages⁸ of a project.⁹ In the final summary an outlook is given on the use of the LFA as a project management tool.

⁸ In the presentation of GEF’s project cycle (Global Environment Facility: The GEF Project Cycle, March 1996) stress is put on procedural steps in the project cycle. They can be divided into three phases: phase 1: from project concept or idea to work program approval; phase 2: from work programme approval to project approval; phase 3: from project approval to project completion. (See respective document). What is meant by **stages** here is more directly related to the project phases themselves, such as project idea, project identification, project formulation (analysis and planning), project implementation, monitoring & evaluation. These stages are accompanied by processes such as decision-taking, learning, feed-back, etc. Also see United Nations Development Programme (UNDP): Global Environment Facility. Information Kit on Monitoring and Evaluation. 1999, p. 2.

⁹ The European Commission worked at the beginning of the 1990ies on the creation of a new framework for project planning and evaluation, which should extend the LFA devised in the 1970ies in the USA. The result was the Project Cycle Management (PCM) model, in which LFA was embedded. Also see Eggers, Hellmut W., p. 69.

2. THE LOGICAL FRAMEWORK APPROACH

In this chapter it is explained which role the LFA plays in project design.

2.1. Introduction

The LFA is a tool – or rather an **open set of tools – for project design and management**. It entails an **evolutionary, iterative analytical process** and a **format for presenting the results of this process**, which sets out systematically and logically the project or programme's objectives and the causal relationships between them, to indicate how to check whether these objectives have been achieved and to establish what external factors outside the scope of the project or programme may influence its success.¹⁰

an open set of tools for project design and management

The LFA can be a **"frame to help logical work"** but it can't substitute for that work¹¹ or, as written in the Danida Manual on the LFA: "LFA is no wonder drug, which can substitute for experience, insight and reflexion"¹².

a frame to help logical work

Benefits associated to the application of the LFA:

Used in a flexible and creative way and building on experience, insight and reflexion the LFA can contribute to:

- **improve project design**
- **foster project performance**
- **facilitate project management**

The LFA can help to achieve:

- **a structured project design process.** LFA suggests a logical sequence, interlinking the individual steps in the design process.
- **transparency.** The reasons why a certain project is meant to be implemented are laid open (what are the problems and whose problems are they?) as well as the internal logic of the project design (what is the project expected to achieve and how?).
- **participation** of the stakeholders involved in the project design and management, which is an essential prerequisite for the **sustainability** of a project.¹³

¹⁰ Commission of the European Communities: Project Cycle Management, Manual. February 1993, p. 18.

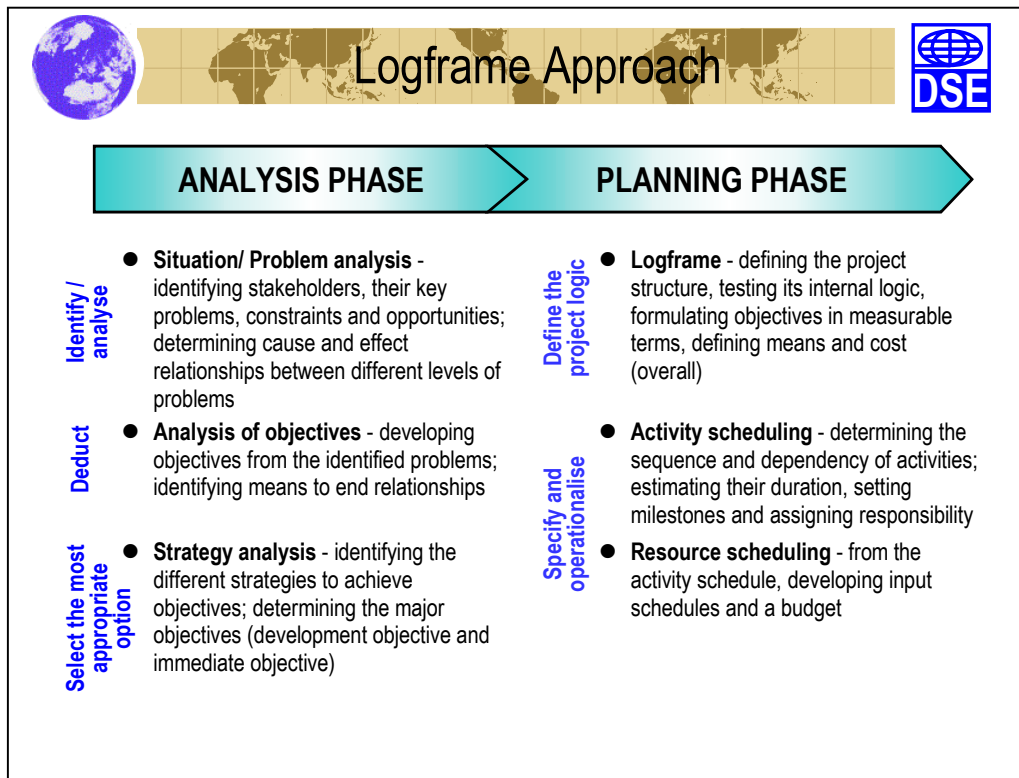
¹¹ Gaspers, Des: Problems in the Logical Framework Approach and Challenges for "Project Cycle Management" in: the Courier, No. 173, January - February 1999, p.77.

¹² Danida, p. 45.

¹³ See also Danida, p.46: "Participation can, if managed properly, create and maintain commitment, decrease resistance to change, build alliances and stimulate initiative, energy and creativity".

- **a consistent project strategy.** The LFA provides tools to clearly link causes and effects. To better assess risks it also takes into account external factors that are crucial for the success of the project, but lie outside the control of the project.
- **objectively verifiable indicators.** Indicators describe objectives in measurable “empirically observable”¹⁴ terms and provide the basis for performance measurement and project monitoring and evaluation.
- **flexibility** in adapting to changing conditions (that are of relevance for the project). The LFA establishes a framework that makes the underlying rationales and assumptions transparent and helps to react to changes by, e.g., revising the design.

Within the LFA process information flow and communication are furthermore enhanced making use of participatory work forms (e.g. workshops) and techniques such as facilitation and visualization.



The LFA is an open set of tools for project design and management. It is crucial to **adapt the LFA whenever necessary**, e.g. by complementing it with other tools to meet specific circumstances and requirements. Applying

flexible use of the LFA

¹⁴ COMIT, p. 75.

the LFA flexibly and creatively it can be a "frame for logical work" instead of a "blueprint" resulting in "logic-less frames" or "lockframes".¹⁵

The LFA consists of two phases: an analysis and a planning phase which are introduced in the following.¹⁶

2.2. The Analysis Phase

A GEF project normally starts with a basic idea generated from stakeholders at the local, national or global level as a result of an **existing, undesired situation linked to global environmental issues**. Ideas have to have a clear link to global benefits and national priorities. The idea describes the "business as usual" scenario, e.g. the depletion of biodiversity, the pollution of international waters and greenhouse gases emitted into the atmosphere.

starting point:
situation analysis

The LFA is an evolutionary, iterative process starting with the **profound analysis of this existing, undesired situation** as a basis for later planning. But what are the most important characteristics of an existing situation? What are the real problems to be tackled by the project? The answer to this question greatly depends on **perception** - in a project context on the perception of the different **stakeholders involved**. Ignoring the perceptions, experience and realities of the different stakeholders can only have an adversary effect on the success of projects or programmes, as experience has shown. During the analysis phase representatives of the stakeholders are therefore brought together and consulted in order to be able to define and provide their views on the existing problems (first step of the analysis phase), to be able to later on analyse objectives on that basis (second step of the analysis phase) and to finally analyse what alternative project strategies exist (third step of the analysis phase). Stakeholder consultations are often organised in form of workshops, but can and should be varied according to the specific conditions and needs.

2.2.1. Stakeholder Analysis

"In order to maximize the social and institutional benefits of the project and minimize its negative impacts, it is extremely important to develop a comprehensive picture of the interest groups, individuals and institutions connected to the environmental problem and project idea."¹⁷ **Stakeholders**

whose
problems?

¹⁵ See also Gasper, Des, p.75 f. – what is meant by "logic-less frames" or "lockframes" is explained in the chapter "Limitations and Risks".

¹⁶ Graph adapted from European Commission, Joint Relex Service for the Management of Community Aid to Non-Member Countries (SCR), Evaluation Unit: Project Cycle Management, Training Handbook. Prepared by ITAD Ltd. Version 1.0, May 1999, p. 15.

¹⁷ Finnish International Development Agency (FINNIDA): Guidelines for Project Preparation and Design. Helsinki, June 1991, p. 109. For checklists with key questions for stakeholder analysis that are not comprehensive but might help to identify crucial aspects to take into account also see Inter-American Development Bank/ Banco Interamericano de Desarrollo:

and projects affect each other – in positive or negative ways. A project that does not take into account the views and needs of the various relevant stakeholders will hardly be able to achieve any objectives in a sustainable way. It is therefore crucial to start identifying and analysing the relevant stakeholders, their interests, problems, potentials, etc. at an early stage to then integrate the stakeholders accordingly into the project design and management.

The procedure for stakeholder analysis is quite undetermined and open. Stakeholder analysis is methodologically not integrated into the LFA sequence as will become evident later. **The findings of the stakeholder analysis rather accompany the LFA process** and can be pictured as a “transparency” that evolves throughout the early stages of the LFA project design process and should be used as an overlay be it for further elaboration or crosschecking during other LFA stages.

Stakeholder analysis shouldn't be carried out using models – the tools chosen should reflect specific requirements. What might be useful though to present in this reader are the **stages** to follow during stakeholder analysis. For each stage the adequate tools have to be identified:¹⁸

- **Stage 1: Identification of all stakeholders involved**

In this first stage, all stakeholders (e.g. individuals, formal/ informal interest groups, e.g. professional groups, family units, migrants, institutions, service or implementing agencies, other projects, etc.) which may be affected by the environmental problem or which may affect the project are identified.

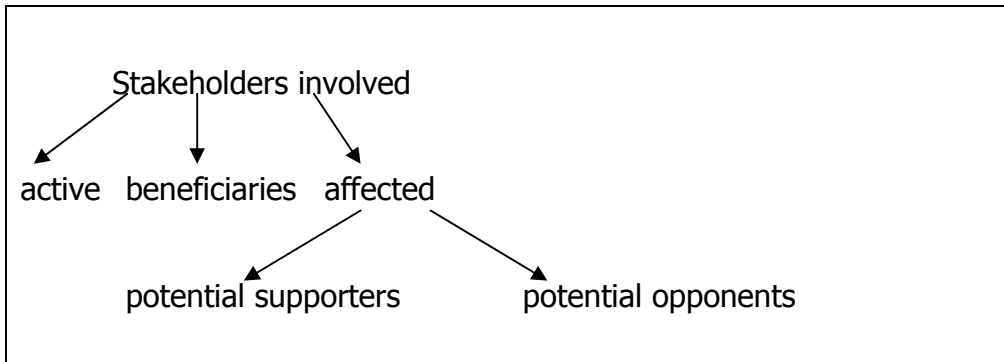
The groups listed are then reviewed to see, whether they are homogenous units or whether they consist of sub-groups or sections with specific interests or problems that have to be listed separately.

It is important to list all stakeholders whose views have to be known in order to fully understand the problem, as well as all stakeholders that are likely to be affected by the project, positively or negatively, in a direct or indirect way. It is equally important to pay attention to gender, as the views and interests of men and women may differ to a considerable extent.

The Logical Framework Approach (LFA): A Structured Approach to Project Planning. At: <http://www.iadb.org/exr/english/POLICIES/participate/sec7.htm>

¹⁸ Adapted from FINNIDA, p. 109ff.

- **Stage 2: Categorization of the stakeholders**



After having listed all relevant stakeholders they are categorized according to the specific relevant criteria, which may differ greatly from project to project. To give an example the graph presented above could be a way of categorizing stakeholders.

After having categorized the stakeholders the most relevant stakeholders for the specific project context are selected for detailed analysis.



- **Stage 3: Detailed analysis of selected stakeholders**

Quite a number of tools are available for a more detailed analysis of selected stakeholders. Once again: the choice, which tool or tools to use always depends on which information is of interest in a specific situation. The two tools presented below should offer some ideas for aspects that might be of interest for stakeholder analysis and how to visualise them.¹⁹

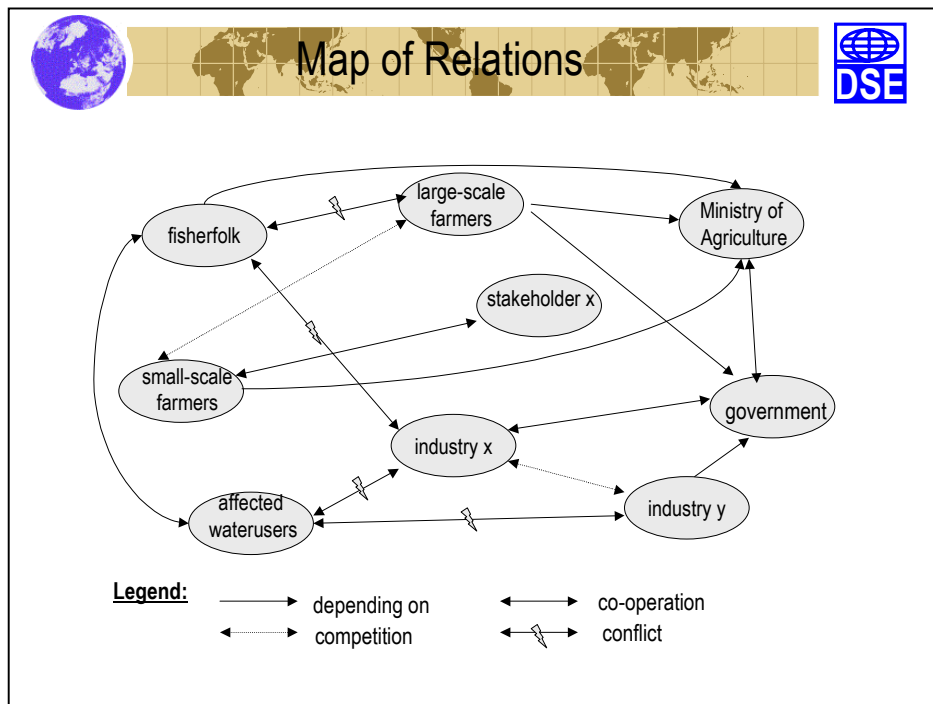
One way to analyse stakeholders is to identify their **individual characteristics** (below) and subsequently the expected **implications for a project** (such as resistance or support). The findings can be displayed in a matrix as can be seen above. At this point it already becomes obvious that stakeholder analysis is done within a specific setting, or a specific situation. In our illustration case the scenario (initial situation) should become clearer when turning to problem analysis.

¹⁹ The World Bank presents in its "Participation Sourcebook" "Beneficiary Assessment" as a method for stakeholder consultation as a qualitative method that relies primarily on three data collection techniques: a) in-depth conversational interviewing around key themes or topics b) focus group discussions c) direct observation and participant observation. For the full document see:

<http://www.worldbank.org/html/edi/sourcebook/sba106.htm>

 Individual Characteristics of Stakeholders 				
stakeholder	characteristics <ul style="list-style-type: none"> • social, economic • structure, organisation, status • attitudes... 	problems & interest <ul style="list-style-type: none"> • unsatisfied needs • interests, objectives... 	potentials & deficiencies <ul style="list-style-type: none"> • resource endowment • knowledge, experience... 	implications for the project <ul style="list-style-type: none"> • support • resistance...
fisherfolk	<ul style="list-style-type: none"> • traditionally important income source for communities • small but active co-operative... 	<ul style="list-style-type: none"> • basis for living is destroyed • strong decrease in income... 	<ul style="list-style-type: none"> • familiar with river and watershed • know pollution hot spots... 	<ul style="list-style-type: none"> • strong support in case of conservation or pollution control measures • resistance in case rights to catch fish are limited...
industry x	<ul style="list-style-type: none"> • important economic factor (strong lobby) • no trade unions... 	<ul style="list-style-type: none"> • maximise profits • interest in image... 	<ul style="list-style-type: none"> • financial resources for new technologies • Resource-saving potential through clean technologies.... 	<ul style="list-style-type: none"> • strong resistance in case of profit losses • strong lobby & influence on government...
small-scale farmers	<ul style="list-style-type: none"> • use of alternative types of cultivation • few monocultures ... 	<ul style="list-style-type: none"> • econom. vulnerable, struggling with competition • save money, increase harvest ... 	<ul style="list-style-type: none"> • under pressure from co-operative (lobby of large-scale farmers) • open to innovation 	<ul style="list-style-type: none"> • little resistance in case of extension/ training with no losses in harvest involved • etc.
... etc. ...				

Another focus that can be chosen for stakeholder analysis is the **relation** between the single stakeholders. A **map of relations** (below) provides an overview of the stakeholders involved and how they relate to each other. If a more detailed analysis is required the stakeholders can be "transferred" into a **matrix** (into the first row and the first column) to specify explicitly the nature and type of relation between two stakeholders.



Stage 4 : Setting priorities

At a certain point during the LFA process a decision has to be taken on which objectives to adopt for the project, i.e. whose interests and views to give priority. Ideally a consensus should be found between the stakeholders involved - realistically an attempt should be made to achieve a compromise between the different stakeholders' views and interests, although at times it might be more suitable to concentrate on the priorities of core stakeholders rather than on a compromise, "nobody is really committed to"²⁰. When defining objectives it is important that it is agreed upon and made transparent which views and interests are given priority to. Attention has to be paid to potential conflicts arising from setting priorities. It should be carefully considered where conflicts could arise, how they could be avoided or mediated, and what impact it would have on the project if the conflicts cannot be avoided or mediated.

For analytical and didactical purposes stakeholder analysis has been presented apart from problem analysis although both are closely connected as part of an initial "situation analysis": without people's views on a problem the **problem** (situation) won't become clear (stakeholder consultation on problems) and without consultations of stakeholders on a problem their **views** (interest, potentials, etc.) won't become clear. The analysis and planning steps of the LFA should be related to the stakeholder analysis, making it a point of continuous reference. Whenever any of the analysis or

²⁰ On this last aspect also see Danida, Annex II, p. 1

planning steps of the LFA has to be revised the stakeholder analysis should be re-considered.

This leads to the statement made initially, that stakeholder analysis is not an isolated analysis step, but a process. The landscape of stakeholders involved in a project evolves with the early analysis stages of an LFA process. To start with careful and elaborate research (empirical analysis) on the different stakeholders might be necessary to be complemented by different forms of direct consultation.

2.2.2. Problem Analysis

Within the LFA it is assumed that for starting to think about a project there has to be a perceivable need for an intervention. Before going further, in the GEF context, in order to be eligible for GEF funding the intervention needs to be "of global interest". GEF project work concentrates on four main focal areas: biodiversity, international waters, climate change and ozone depletion. The term "global significance" means in this respect that the project either aims at reducing or eliminating a threat to a biodiversity or international waters resource or in the case of climate change, tries to remove a barrier to the establishment of a renewable or energy saving technology. If the general project idea does not meet these criteria, the project is not eligible for GEF funding and support needs to be sought from other donors.

which
problems?

It is assumed that a need for an intervention exists if there is an undesired situation. The intervention (project) is meant to help solving the undesired situation. Within the LFA "undesired situation" is translated and crystallised into "problems". Analysing problems therefore means to analyse an existing situation.

During problem analysis the negative aspects of an existing situation are analysed. Key problems are identified and the causal relationship between them.

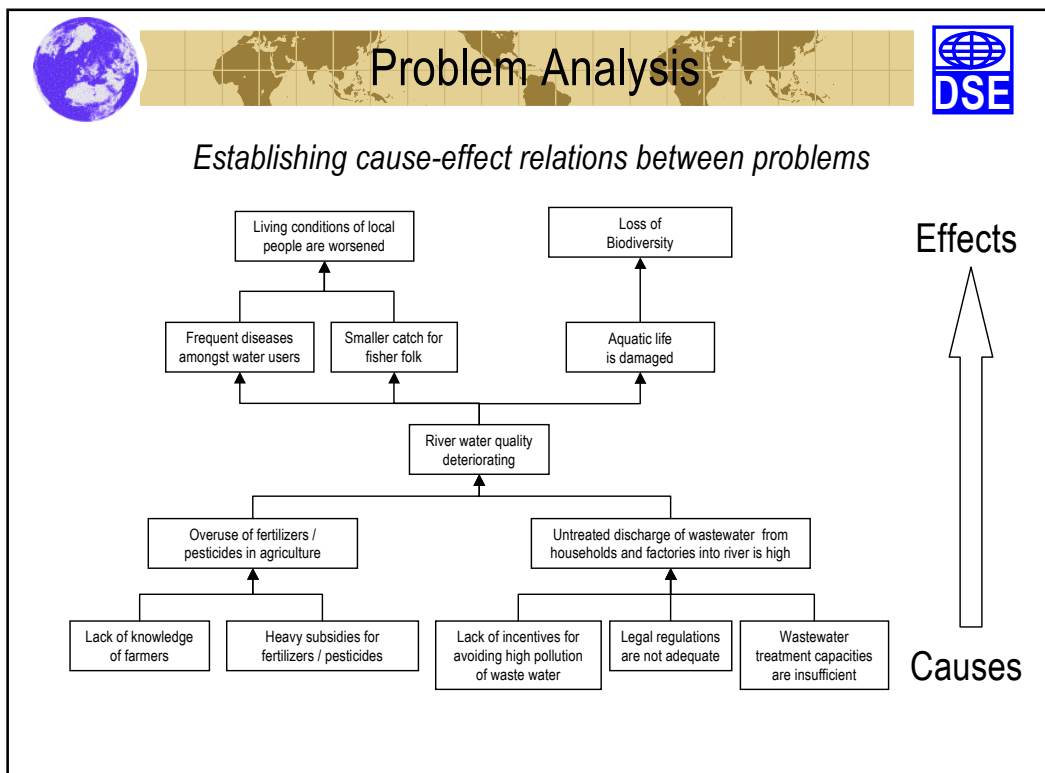
Initially information on the existing situation has to be collected and analysed which, depending on the complexity of the circumstances, might take a long time. On this basis the stakeholders identified are consulted for their views and perceptions. The consultations can take place through various forms²¹ that have to be chosen depending on the stakeholders. Often the consultations are organised as participatory workshops. "Brainstorming" can be used as a technique at the beginning of a workshop to identify key problems with the stakeholders. Having collected a number of key problems a so-called starter problem is selected to begin with clustering the problems: a

identification of
causes and ef-
fects between
key problems

²¹ e.g. round tables, informal meetings, semi-structured interviews or other rapid appraisal techniques (e.g. Rapid Rural Appraisal/ RRA or Participatory Rural Appraisal/ PRA).

hierarchy of **causes** and **effects** is being established between the problems identified, slowly drawing up a “**problem tree**”²²:

- problems which are directly causing the starter problem are placed **below** it;
- problems which are direct effects of the starter problem are positioned **above** it;
- problems that are neither a cause nor an effect are positioned at the **same level** as the starter problem.



In the illustration case this could mean that after having identified and discussed the existing key problems one problem, e.g. “untreated discharge of wastewater from households and factories into river is high” is chosen as a starter problem. Now the other problems identified are screened to see whether there are problems related to the starter problem as **causes**. Those problems are placed **below** the starter problem (lack of incentives for avoiding high pollution of waste water, legal regulations are not adequate, etc.). Then the pool of problems identified is screened again to see whether there are problems related to the starter problem as an **effect** – those

²² Before starting with the development of a problem tree, that displays the identified problems in a hierarchical order (causes – effects), a network diagram can be established that displays the problems and how they are connected (indicated through arrows) in a non-hierarchical way. Using the network diagram might help to get a first picture of the problem environment before analysing the relationships between the problems in greater detail.

problems are placed **above** the starter problem (river water quality deteriorating) and so on. Slowly a problem tree will evolve relating the remaining problems identified to the problems in the tree. Whenever necessary (to keep the causes-effect logic) the tree has to be restructured.

There are a number of difficulties that occur frequently during problem analysis²³:

difficulties with
problem analysis

- steps are being left out: the cause – effect relationships between the key problems are not direct, **one or more steps are missing in the logical sequence**. It is therefore important to review the problem tree established to see, whether the logical sequence between the different levels of problems is correct, or whether something is missing or has to be changed;
- **the same problem is mentioned twice** using a different wording. Example: Working the ground with the hoe, use of local seeds and small amounts of seed do not LEAD to traditional agriculture but ARE traditional agriculture. They may lead to a small yield, which as a result would have to be indicated as an effect on a higher level;
- **a number of problems are presented as only one problem**. They have to be separated in order to be able to identify the cause-effect relationships between them and see “which problem leads to which other problems”;
- **the problems stated are not specified in sufficient detail** and do not communicate the true nature of a problem. Example: “Poor management” does not specify what the real problem is and has to be broken down in order to understand the problem and analyse its causes, which could be poor financial control, late delivery of key services, etc.²⁴
- instead of negative aspects of an existing situation **the absence of a solution is stated as the problem**, predetermining the solution. Example: It is not the lack of pesticides that leads to a reduction of potato yield, but the pest itself that affects the potatoes. If in the problem analysis “lack of pesticides” is stated, the only possible solution can be “pesticides are available”. Pest however can be controlled in various ways, e.g. biologically or manually, depending on the circumstances.

While establishing the problem tree it should be kept in mind to state problems as negative situations. It is also important to remember that a problem’s positions within the hierarchy established (“problem tree”) does not indicate its importance but shows its causal relation with other key problems.

²³ Translated and adapted from: Dressler, Jürgen: Für einfaches und korrektes Zoppen: Die fünf Sticker. In: entwicklung + ländlicher raum, 3/ 1987.

²⁴ European Commission, 1999, p. 18.

What level of detail of problem analysis should be achieved during a workshop has to be decided on the spot depending on the necessities and the opportunities for further consultations.

Stakeholder analysis and problem analysis form part of the analysis of an existing negative situation ("situation analysis"). In some organisations the analysis of **potentials** forms part of this initial analysis phase.²⁵ It is meant to add to the picture of the problems in a given situation resources or opportunities (potentials) that might help to solve the problems. Generally different types of available resources such as natural resources, capital, infrastructure and labour force and other kind of opportunities are considered to be potentials. They might later on be utilized to achieve objectives. Analysing them at the beginning helps to get a more dimensional picture of a given situation and might later on help to choose a project strategy, making use of existing resources.

potentials as part of the situation analysis

2.2.3. Analysis of Objectives

While problem analysis presents the negative aspects of an existing situation, analysis of objectives describes a future situation that will be achieved by solving the problems identified.

During analysis of objectives potential solutions for a given situation are identified. This involves the reformulation of the negative aspects ("problems") identified into positive ones (envisioned for the future) drawing up an "**objectives tree**". In the objectives tree now the **objectives** are structured in a hierarchical order and the former cause-effect relationships between the key problems are turned into means-end relationships between objectives (what needs to be done to achieve what?). The objectives derived should reflect the future, desired situation but should be **realistically achievable** (which can be achieved by e.g. qualifying the objectives). The rationale of the reformulation is to derive the objectives directly from the actual existing problems identified and not from elsewhere.

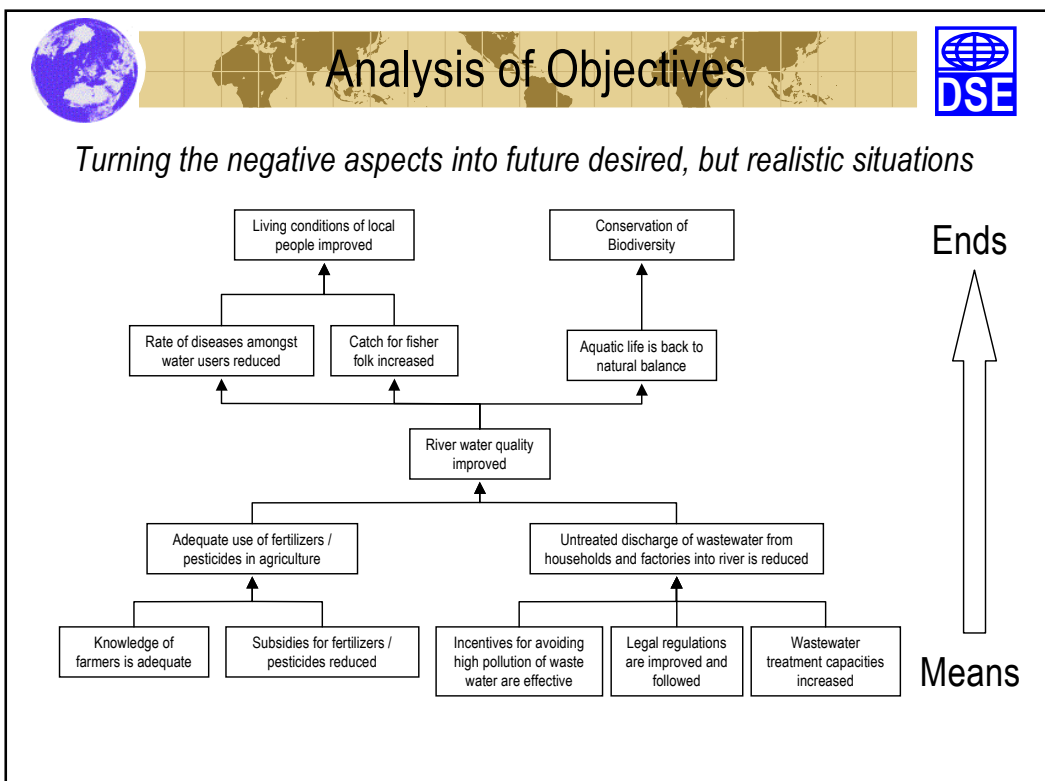
identification of potential solutions for a given situation

Looking at the former "starter problem" in the illustration case "untreated discharge of wastewater from households and factories into river is high" is now reformulated as an objective into "untreated discharge of wastewater from households and factories into river is reduced". By saying "reduced" the objective is qualified as the target will not be an absolute one ("no untreated discharge of wastewater from households and factories into river"). This absolute objective would, in this case, most probably be unrealistic. Qualifying the objectives at an early stage will also later on help to define targets (indicators).

²⁵ E.g. in the Objectives - Oriented Project Planning (ZOPP) of the German Corporation for Technical Cooperation (GTZ), or in FINNIDA's project planning strategy (see also FINNIDA, p. 50).

As after having established the problem tree it is important to review the objectives tree (the means–end relationships) to ensure validity and completeness of the hierarchy of objectives. It might for example be necessary to revise statements or to add new objectives in case they seem to be relevant and necessary to achieve the objective at the next higher level.

Attention has to be paid to the fact, that some problems cannot simply be reformulated, as they cannot be influenced (e.g. heavy rainfalls, insufficient budgets made available, etc.).



2.2.4. Strategy Analysis (“Analysis of Alternatives”)

The final stage of the analysis phase involves the identification of possible solutions that could form a project strategy and the selection of one or more strategies to be followed by the project. During strategy analysis (or “analysis of alternatives”) a decision is being taken on which objectives **will** and which objectives **won’t** be pursued within the frame of the project. The starting point for strategy analysis is the objectives tree. The choice of one or more strategies is made on the basis of criteria which have to be agreed upon and defined with the stakeholders, depending on the specific project context. Possible criteria could be: costs, urgency, resources available, social acceptability, gender aspects, time perspective of benefits, feasibility, development policy guidelines, etc. The information gained during stakeholder analysis (potentials, support, resistance, etc.) and analysis of

identification
and selection
of a project
strategy

potentials should also be taken into consideration as a reference for decision taking.²⁶

In the GEF context the set of criteria to be used in the strategy analysis are largely pre-established by a series of GEF specific requirements. If the global interest check point is passed successfully the next question is, whether the project is "gefable". "Gefable" relates to the conformity with national priorities and the strategic fit of the idea into the GEF portfolio, as well as the portfolio of the GEF Implementing Agency (UNDP, World Bank, or UNEP). Guidance for this has been provided by the Conference of the Parties (COP) of the two conventions, the Convention on Biological Diversity (CBD) and the United Nations Framework Convention on Climate Change (UNFCCC). **The GEF Operational Strategy and the Operational Programmes reflect the COP guidance and thus constitute the main framework for eligibility.** The GEF will not finance activities in the areas of biodiversity and climate change that do not fully conform to the guidance from the COP. Additional information is included in national Biodiversity Strategies and Action Plans (BSAPs) and National Environmental Action Plans (NEAPs) and the work program of the GEF Implementing Agencies. Again, if a project concept is not 'gefable', GEF cannot fund the activities.

GEF eligibility also refers to the incremental nature of the activities envisaged in the strategy since GEF financing is available to meet the agreed incremental costs of measures to achieve global environmental benefits. The realistic baseline –the kind of interventions and projects that would take place without GEF involvement, including other donor activities- needs to be identified in the first place.

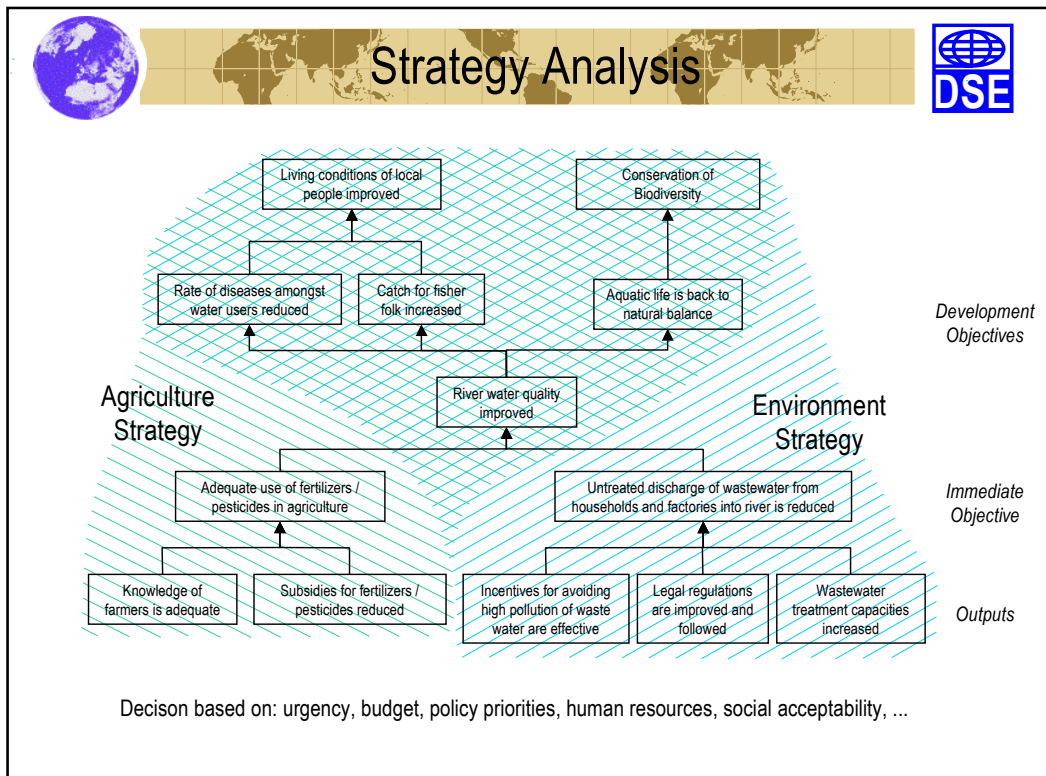
A comparison of the agreed system boundary and the information available on the realistic baseline will show potential gaps, which when further analyzed will lead to a list of programmatic gaps, the activities likely to be founded with GEF funds. An analysis of the realistic baseline on the other hand should yield some quantitative estimates about baseline costs.

In the illustration case – which is not a specific GEF case study - (below) the two possible strategies identified are a) an **agriculture strategy** (focussing on the adequate use of fertilizers and pesticides in agriculture) and b) an **environment strategy** (focussing on the reduction of untreated discharge of wastewater from households and factories into the river). Both have to be pursued in order to improve the quality of the river quality. This can be done in different projects, or in different sub-components tackled by the same project or programme.

²⁶ There are a huge number of instruments that can be used to facilitate actually choosing a strategy such as: utility analysis, cost-benefit analysis, SWOT-analysis (Strengths - Weaknesses – Opportunities – Threats), cost-effectiveness analysis, force field analysis, and others. For short introductions to SWOT-analysis and force field analysis see Jackson, Bill, p. 6; further explanations on the tools can be sought from literature on project management (also on the internet). Also see COMIT, p. 45 on utility analysis.

The scope and amount of work entailed in the strategy or strategies chosen determines the "size" of the intervention – be it project-size or programme-size (consisting of a number of projects).

The review and incorporation of lessons learned from former projects is an useful support tool at this point and also throughout the whole LFA process.



Having selected a project strategy the different levels of objectives (immediate objective and development goal) can be identified, which will later on be transposed into the logical framework matrix (or short form: logframe matrix).

2.3. The planning phase

The main output of the LFA is the **logframe matrix** (short form for logical framework matrix) – it could also be called the **“product” of the LFA**. The logframe matrix is a **format** for presenting the results of the LFA as a process, and is developed on the basis of the LFA tools applied earlier during the analysis phase:

Out of the strategy analysis (based on problem and stakeholder analysis and the analysis of objectives) the different levels of objectives are being transposed into the first column of the matrix (project strategy). During the planning phase of the LFA it is further elaborated which external factors are crucial for the projects success (assumptions), where to find the information required to assess its’ success (indicators and sources of verification) which means are required to achieve the project’s objectives and what the project will cost. On this basis activity and resource schedules can be established.

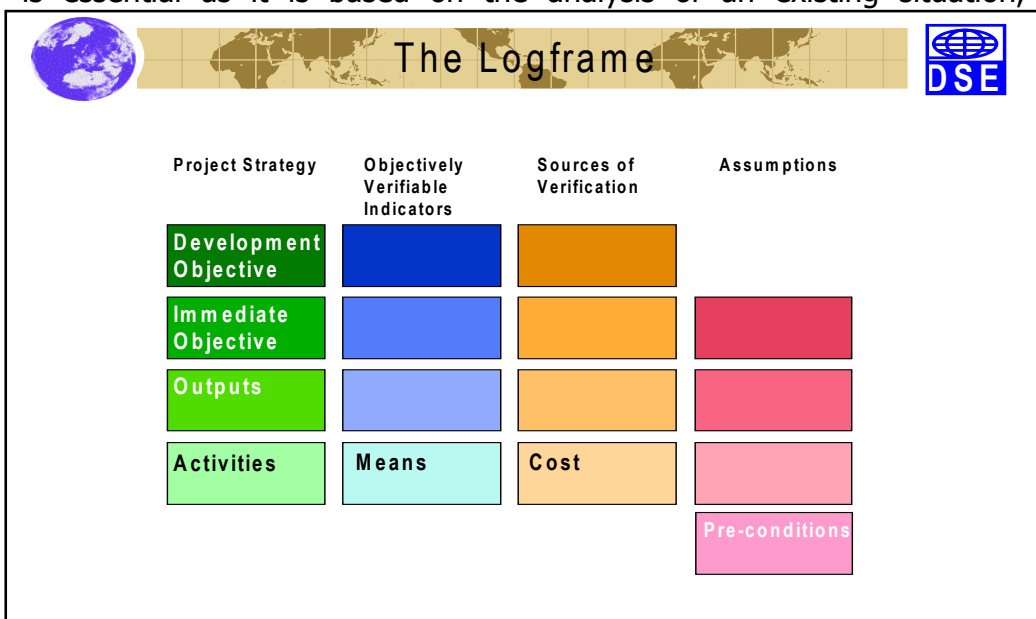
2.3.1. The Logframe Matrix

It is true that the logframe matrix is comprised of 16 “boxes”, but it is not true that establishing a logframe matrix means to “fill in the boxes”. Behind every “box” stands careful analysis and logical reasoning that has to be pursued **before** filling in the boxes – which is only the final activity, a product - the summary of a longer process. If this often time-consuming process is not carried out, poor, unstructured project design and a lack of ownership among stakeholders can be the result. LFA is **not a matrix** it is an **approach**. The quality of a project summary (presented in form of a matrix) always depends on the quality of the analysis work done before establishing the summary.

logframe matrix as a format for presenting the results of the LFA process

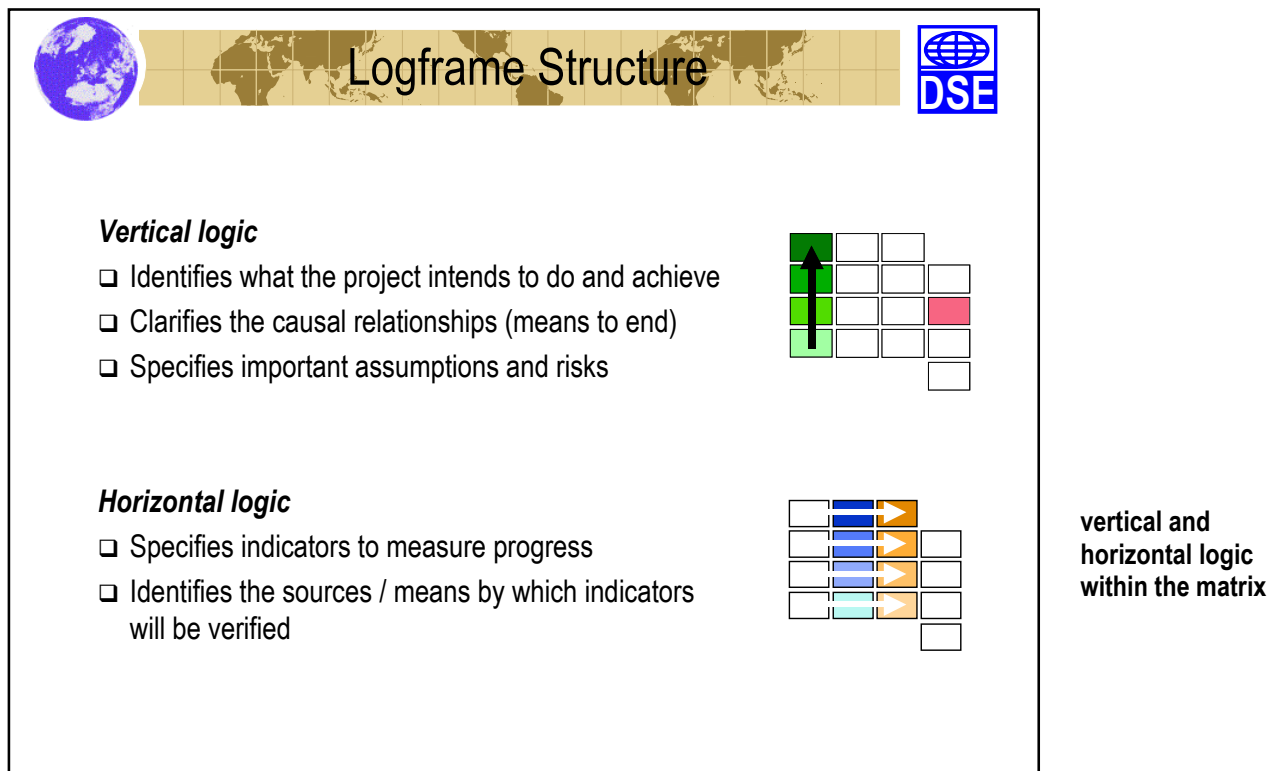
What was said earlier about the LFA as a whole **approach** can also only be true for the logframe **matrix** as its principal outcome: **flexibility in its use** is essential as it is based on the analysis of an existing situation, and

updating the logframe matrix



situations or circumstances can change as the project develops. Those changes might have to be taken up by reviewing and adapting the project design – and the matrix consequently. A logframe matrix should reflect a project strategy derived from the careful analysis of an existing situation - not vice versa.

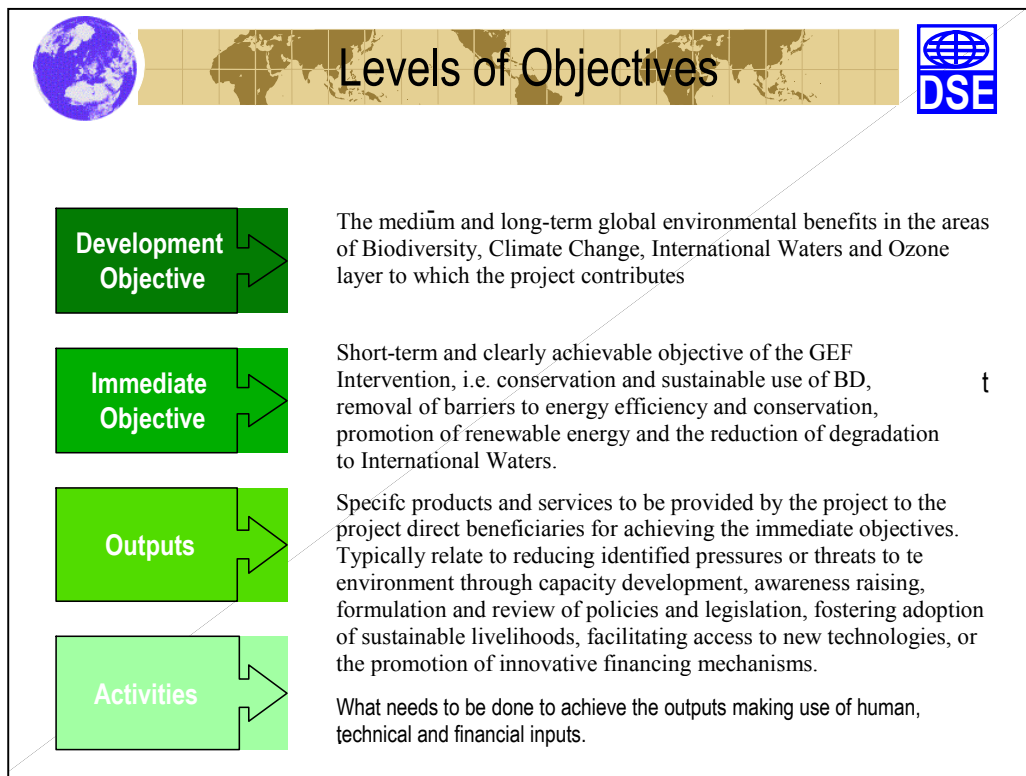
The logframe matrix consists in its most basic format used for illustration purposes here of "16 boxes": four columns and four rows forming a matrix. Within the **vertical logic** of the matrix (first column = project strategy) it can be identified what the project intends to achieve and how (clarifying the causal relationships between the different levels of objectives), specifying important underlying assumptions and risks (fourth column of the matrix). Within the **horizontal logic** of the matrix indicators to measure progress and impact are specified and the sources or means by which the indicators will be verified.



The matrix serves as a **summary of the key information on the project**. It provides an easy overview that allows a quick assessment of the consistency and coherence of the project logic.²⁷

²⁷ How detailed the information is presented in the matrix depends on the stage of the project and on the purpose the matrix should serve. See also: Danida, p. 40f.

2.3.2. Levels of Objectives



The project strategy reflected in the first column of the logframe matrix is derived from strategy analysis: the objectives chosen for inclusion in the project are transposed into the matrix. When transposing the objectives it is important to distinguish between different levels as defined above.

An **agreement** has to be reached among the stakeholders on what the **immediate objective(s)** of the project should be. Once this level of objective has been defined, the objectives that fall under the strategy chosen during strategy analysis can be transposed into the first column of the logframe matrix. Attention has to be paid to distinguish between the different levels of objectives. The project strategy incorporated in the first column of the matrix has to be reviewed to see whether the means to end relationships established between the different levels of objectives are consistent, or whether additional outputs or activities are required in order to achieve the objective(s) on the next level²⁸.

transposing objectives into the matrix

Some organisations strongly promote the **use of only one immediate objective**. In the Project Cycle Management Training Handbook of the European Commission it is stated that more than one immediate objective

using only one immediate objective

²⁸ Apart from deducing activities from the hierarchy of objectives it might be necessary to carry out a study to identify the activities required. Activities can also be identified through discussions with stakeholders (e.g. in form of a planning workshop).

"would imply an overly complex project and possible management problems." Multiple immediate objectives "may also indicate unclear or conflicting objectives."²⁹ Danida also stresses that there should only be one immediate objective: "The project has only one immediate objective, or if more, the objectives are compatible, complementary and at the same level."³⁰ A recommendation generally made in cases of multiple immediate objectives is to try to reformulate them into one immediate objective. If this is not possible because the objectives are too diverse and forcing them into one objective doesn't make sense, two or more logframes should be drawn up for the different immediate objectives, to represent sub-components of a project.

In the illustration case the immediate objective agreed upon is "pollution load of wastewater discharged into river is reduced" and the development objectives are "living conditions of local people improved" and "biodiversity of globally significant aquatic life conserved". The strategy chosen is the "environment strategy" so that the level of objective below the immediate objective (the outputs) is also transposed into the logframe matrix ("incentives for avoiding high pollution load are effective"). For graphical reasons there is only one result stated in the illustration case– for a more complete logframe matrix see chapter 2.4.

2.3.3. Assumptions

A project strategy can never cover all aspects of an existing situation. The moment a choice is made on which objectives to pursue with a project at the same time a number of aspects are being **left outside** the scope of the project. Those that have to be attained in order to reach a project's objectives become external factors that **influence or even determine the success of the project, but lie outside the control of the project.**

assumptions as external factors crucial for the project's success

Additional external factors to be included in the logframe matrix can be derived from the stakeholder analysis: problems identified that are not tackled by the project itself might have to be included. Further external factors that have to be met in order to achieve project objectives can be identified by logical reasoning: reviewing the logframe matrix systematically starting with the lowest level of objectives, asking what further external factors have to be fulfilled in order to achieve the next higher level of objectives. Frame conditions i.e. macro-economic, institutional-political, ecological and socio-cultural frame conditions, which cannot easily be influenced, should be considered for inclusion as assumptions.³¹

The aim of specifying assumptions (and pre-conditions) is to **identify and assess potential risks to and dependencies of the project right from**

identification and assessment of potential risks

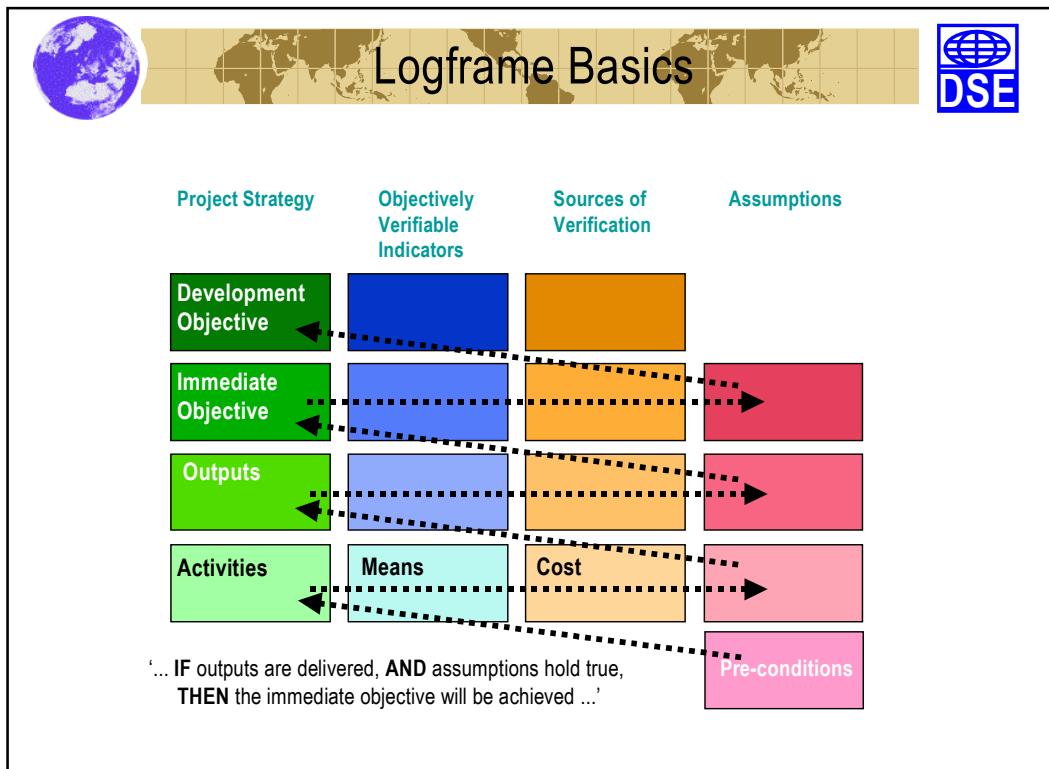
²⁹ European Commission, 1999, p. 24.

³⁰ Danida, Annex II/ Checklists, p. 2.

³¹ Also see COMIT, p. 70.

the initial stages of project design, to support the monitoring of risks during the implementation of the project and to provide a basis for necessary adjustments.

Assumptions are displayed in the fourth column of the logframe matrix and are stated in positive terms (as assumptions that have been accomplished). Below, their inter-linkage with the different levels of objectives can be seen (if activities are carried out and assumptions hold true, then the outputs will be delivered, etc.).³²

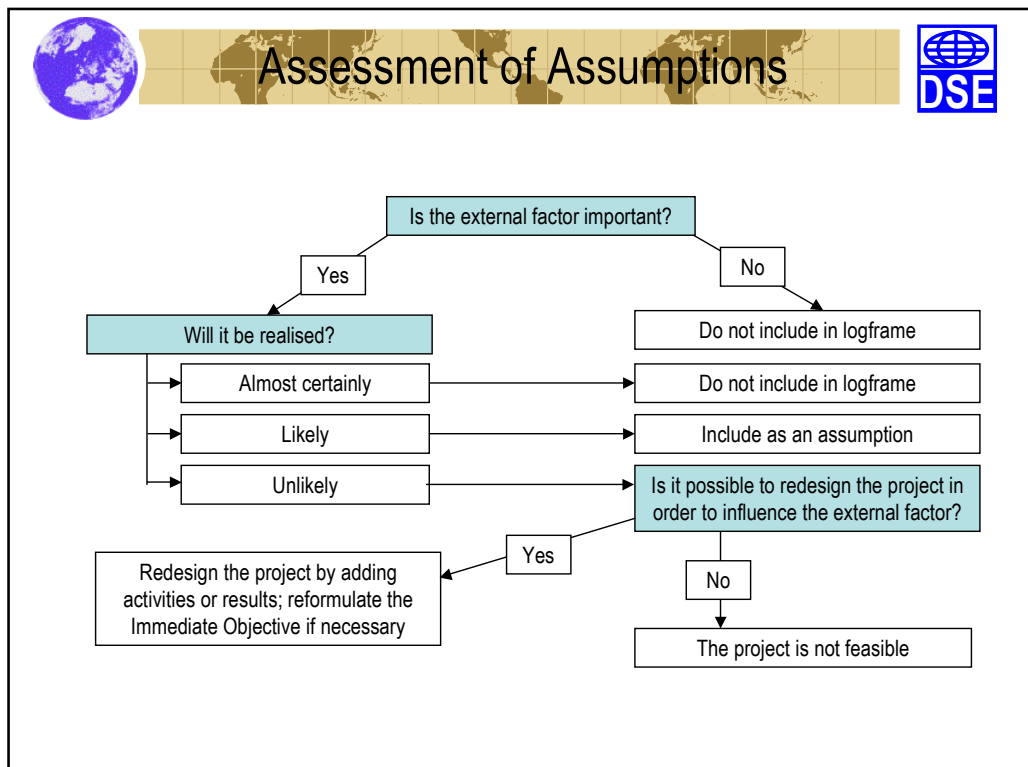


For the illustration case the sequence, starting from the outputs, would read: "if the outputs are delivered ("incentives for avoiding high pollution of wastewater are effective" + other outputs) and the upstream water quality remains stable (assumption, stated positively as accomplished) then the pollution load of wastewater discharged into the river will be reduced". As can be seen in the graph there might also be **pre-conditions** that have to be accomplished in order to be able to achieve the project's objectives. A **pre-condition** is different from an assumption in that it is a condition that must be fulfilled or met **before** project activities can start.

³² Graph adapted from European Commission, 1999, p. 23.

The decision on whether or not to include an assumption in the logframe (is it sufficiently important?) can become difficult. Indicating assumptions should serve the purpose to assess the weight of risks and dependencies before deciding on the implementation of a project and later on to observe these risks and dependencies during project implementation. The choice which assumptions to include in the matrix should be made bearing this purpose in mind. In general the risks for project implementation should not be too high. Stating many assumptions in the logframe suggests high risks for a project, that's why only the most important (in the sense described above) assumptions are mentioned. Exceptions definitely exist where risks are willingly being accepted and the project is willingly being placed in an "insecure" setting. The decision depends on the acceptability of risks for a project in a specific situation. The purpose of stating risks and dependencies stays the same, that is to identify, assess and observe them.

which assumptions to place in the matrix?



For group discussions it might be of help to use the algorithm displayed above. It is by no means a "mathematical" instrument as the name might suggest. It can help to facilitate and structure group discussions to distinguish between those assumptions to be included in the matrix and those to be left out.³³

³³ Graph adapted from European Commission, 1999, p. 27.

Following the algorithm’s logic (above) it becomes clear that those external factors that are **essential** for the project to achieve its objectives, but will most probably **not be realised** become so called **“killer assumptions”** if the project cannot be redesigned to achieve its objectives without having to rely on the realisation of the respective external factor.

“killer assumptions”

		Project Strategy	Objectively Verifiable Indicators	Sources of Verification	Assumptions
Development Objectives	<ul style="list-style-type: none"> Biodiversity of globally significant aquatic life conserved Living conditions of local people improved 				
Immediate Objective	Pollution load of wastewater discharged into river reduced				Pollution through application of fertilizers/ pesticides reduced
Outputs	1. Incentives for avoiding high pollution of wastewater are effective				Upstream water quality remains stable
Activities	1.1 Analyse environmental investments of companies 1.2 Identify relevant clean technologies 1.3 Design incentives 1.4 Test incentives 1.5 Adapt incentives	Means	Cost		
				Pre-conditions	Foreseen budget for environmental measures is available in time

Assumptions are not meant to serve as excuses for project managers shifting responsibilities for sustainability outside the range of the project (on the development objective level). Sustainability has to be build into the project design, otherwise it won't be accomplished, especially not through factors external to the project.³⁴

2.3.4. Objectively Verifiable Indicators

Objectively verifiable indicators (OVIs) describe a project’s objectives in measurable “empirically observable”³⁵ terms and provide the basis for performance measurement and project monitoring and evaluation: they are **parameters of change or of results**, indicating as to what extent the project objectives have been achieved. Indicators help to create **transparency** conveying to others what the project intends to achieve and are placed into the second column of the logframe matrix.


indicators as parameters of change or results

³⁴ Also see COMIT, p. 71.


³⁵ COMIT, p. 75.

Indicators clarify the characteristics of the different levels of objectives of a project. When formulating indicators it should be paid attention that the indicators are³⁶:

- **objectively verifiable**, that means that different people should come to the same results when using the indicators in a monitoring or evaluation process;
- **independent** from each other, each one relating to a specific objective;
- **plausible** in that the effects observed are direct results of project interventions;
- **specific** with regard to quality, quantity, target group, time/ period and place (the 5 dimensions of an indicator);
- **measurable** (directly or indirectly), so that they can be assessed;
- **based on accessible information** (also in terms of time and money).³⁷



**How to define
Objectively Verifiable Indicators (OVIs)?**




1. Specify for each output, the immediate objective (and the development objective) the indicator, according to criteria for good indicators.
2. Define, on the basis of the indicator, "targets" (precise aims of the outputs and the immediate objective):
 - Quantity \longrightarrow How much?
 - Quality \longrightarrow What?
 - Target group \longrightarrow Who?
 - Time / period \longrightarrow Starting when and for how long?
 - Place \longrightarrow Where?

Often it is necessary to establish several indicators for one objective – together they will provide sufficiently detailed and reliable information on the

³⁶ Adapted from PARTICIP GmbH, p. 19

³⁷ Another rather easy to remember acronym used to describe the qualities, a good indicator should have is: SMART (specific, measurable, attainable, relevant and trackable).

achievement of an objective. At times it might be difficult to identify good indicators and it might require very specific professional know-how and experience.³⁸ Developing meaningful indicators therefore sometimes is better done in a smaller working group of professionals. The final decision on what kind of indicators to use generally evolves around the three factors preciseness of an indicator and costs and time connected to its retrieval.³⁹



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:**
 - **Define the quantity:** Concentration of heavy metal compounds (Pb, Cd, Hg) is reduced by 75% compared to year x levels ... (particular attention should be paid to the availability of baseline information)
 - **Define the quality:** ... to meet the limits for irrigation water ...
 - **Define the target group:** ... , used by the farmers of Blue village, ...
 - **Define the place :** ... in the Blue river section of the District ...
 - **Determine the time:** ... 2 years after the project has started

2.3.5. Sources of Verification

Sources of verification (SOVs) describe where and in what form to find the necessary information on the achievement of objectives (indicators). Questions to be clarified when looking for sources of verification for the indicators are:

- Do **appropriate external sources already exist** (e.g. reports, statistics)?

SOVs describe where and in what form to find indicators

³⁸ An indicator though does not always have to be a “five-dimensional” one, indicating quantity, quality, timeframe, target group and place as in the example. Sometimes the target group or one or more of the possible dimensions is/ are absolutely clear and obvious and do not have to be stated explicitly.

³⁹ For a short introduction to indicators used in the GEF context (two categories: indicators of implementation progress and of environmental impact) also see: UNDP, p.10; for a short overview of the various types of indicators - from input and output indicators to performance and structural indicators also see: COMIT, p. 76 (types of indicators are stated and a short definition is given, but no examples).

- Are these sources **specific** enough?
- Are the sources **reliable** and **accessible**?
- Is the **cost** for obtaining the information **reasonable**?
- Should **other sources be created**?

Where external sources exist that cover the requirements they should be used as much as possible to avoid high costs. If no meaningful and cost-effective source of verification can be found, the indicator depending on the source of verification has to be adapted or changed.

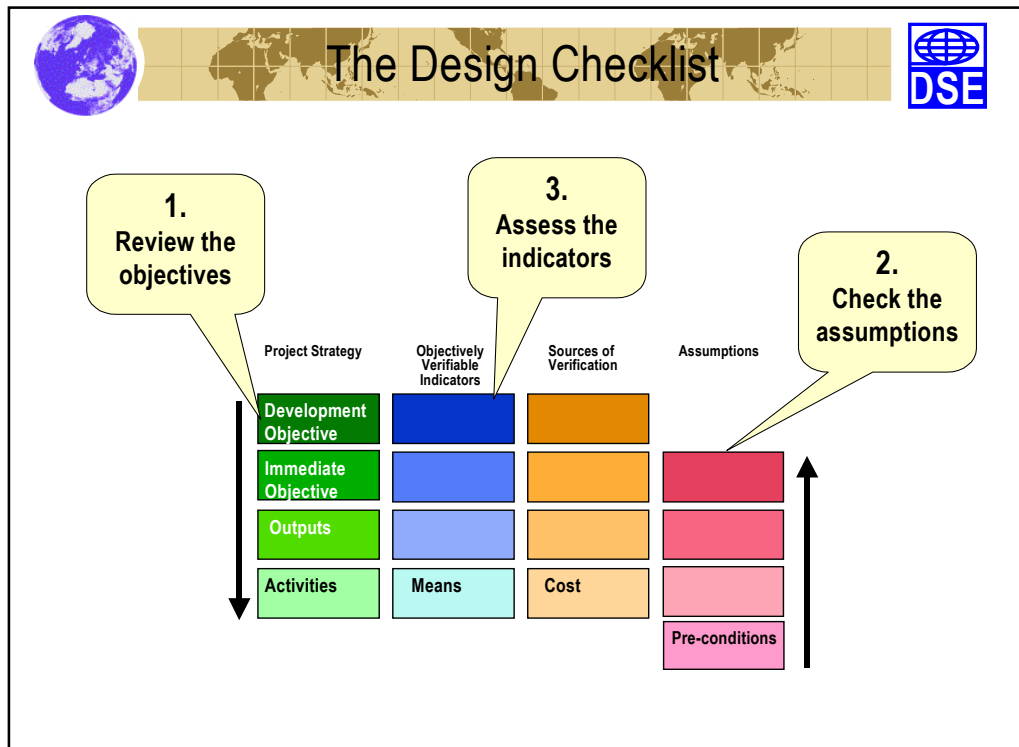
Sources of verification are placed into the third column of the logframe matrix.

2.3.6. Means and Cost

Means are the human, material and service resources (inputs) needed to carry out planned activities and management support activities. **Cost** are the financial resources needed to carry out these activities. In order to be able to estimate human, material and financial resources needed it is necessary to specify the planned activities and the management support activities sufficiently.

means and cost
give an overview
of inputs needed

It is also important to bear in mind that the LFA exercise will require specific allocation of funds to finance activities such as consultations, ad-hoc meetings/workshops, or hiring of consultants if necessary, to carry out stakeholder analysis, preparation of the Planning Matrix, etc. In the GEF context, this translates into the need to incorporate these costs in the PDF A or PDF B budgets. For the project implementation stage, the collection and analysis of data identified in the indicators might entail also costs that should be reflected in the M&E budget line within the total budget for the project.



The summary of means (human and material resources) is integrated into the second column, 4th row of the logframe matrix. The summary of estimated cost (financial resources) is placed into the 3rd column, 4th row, adding the last aspects to the project summary (logframe matrix). After having integrated means and cost into the logframe matrix it should be reviewed, whether the means and cost indicated are directly related to the activity concerned and whether all key resources needed (means and cost) have been listed and are sufficiently specified. Clear and logical relationships between outputs, the respective activities to be undertaken, and the inputs necessary form a good basis for budgeting and detailed work planning.⁴⁰

2.3.7. Activity and Resource Schedules

A logframe matrix provides a summary of the key information on a project. "Key information" means, that in general only the most important aspects are being included, without elaborating the operational details needed for further planning and implementation. Activity and resource schedules are a means to provide the **operational detail needed**. Following the LFA sequence they are established on the basis of the logframe matrix. Having drawn up an activity schedule that specifies a project's activities in operational detail a resource schedule can be drawn up to elaborate on the cost of the means required.

activity and resource schedules provide operational details

⁴⁰ See also FINNIDA, p. 97.

2.3.7.1. Activity Schedules

In an activity schedule a project's activities are broken down into operational detail. An activity schedule⁴¹:

- lays open **dependencies** between activities;
- clarifies the **sequence, duration and precedence** of activities;
- identifies **key milestones** to be achieved;
- serves as a **basis for project monitoring**;
- **assigns management responsibility** and **implementing responsibilities**.

Starting from the logframe matrix established the activities specified in the first column/ last row are transferred into the first column of the activity schedule format, then⁴²:

- **Break the activities down into sub-activities and manageable tasks.**

The activities shouldn't be specified in too much detail, but they should be detailed enough to provide the basis to estimate time and resources needed to carry out the activities, and they should be detailed enough that the person finally assigned to carry out the activities has sufficient instructions on what has to be done.

- **Clarify sequence and dependency of the activities.**

After having specified the activities in operational detail, they must be related to each other to see in which order they have to be undertaken (sequence) and which activity depends on the start up or completion of another activity (dependencies).

⁴¹ Adapted from PARTICIP GmbH, p.23.

⁴² Adapted from European Commission, 1999, p. 37ff.

- **Specify start, duration and completion of activities.**

Specifying the timing of project activities means to make estimates on the duration of tasks, building those estimates into the activity schedule - indicating likely start and completion dates. To make sure that the estimates are realistic people having the necessary technical knowledge or experience should be consulted. Often the time needed to carry out activities is underestimated due to a number of reasons which can be the omission of crucial activities of tasks, failure to allow sufficiently for interdependence of activities, a failure to allow for resource competition (i.e. scheduling the same person or piece of equipment to do two or more things at once) and a desire to impress with the promise of rapid results.⁴³

- **Define milestones.**

Milestones define targets to be achieved by the activities and provide the basis for monitoring. A simple milestone is the completion of a task to a planned date. In an activity schedule the activities, sub-activities and tasks are listed in a consecutive way, therefore accomplishing a certain task in time can be seen as a milestone on the way to achieving outputs.⁴⁴

- **Assign tasks and responsibilities.**

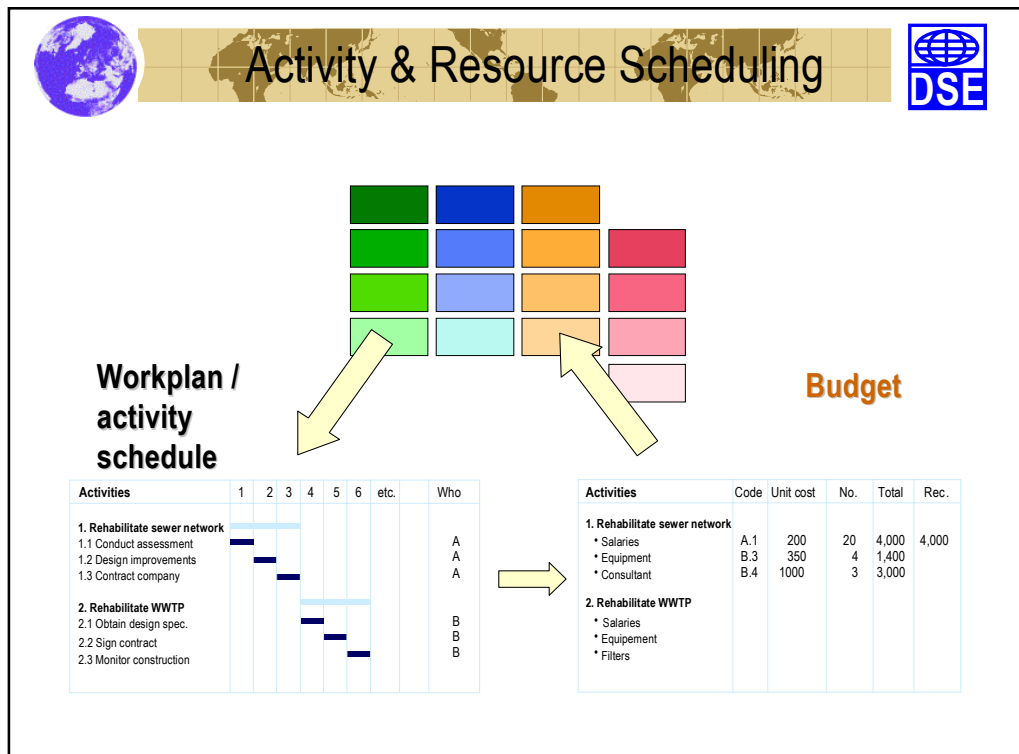
Allocating tasks also means allocating responsibilities for achieving milestones. It is a means of defining the accountability of the members of a project team. Before allocating tasks the expertise required to carry out the respective tasks has to be specified. By doing so it can be checked whether all necessary human resources are available and the schedule is feasible.

Activity schedules lay the ground for further planning (resource schedules) and later on for project management. They provide an initial benchmark including estimates that might have to be revised in the light of changing circumstances or actual implementation performance.

A possible format for presenting an activity schedule is a Gantt Chart, which – apart from milestones and responsibilities – allows to get a rapid overview of the sequence, duration and interrelation of activities to be undertaken.

⁴³ European Commission, 1999, p 38.

⁴⁴ See also COMIT, p. 85.



2.3.7.2. Resource Schedules

Resource schedules provide the **basis for the planned mobilisation of (external and local) resources**, facilitate **results-based budgeting** and the **monitoring of cost-effectiveness**. Resource schedules also identify **cost implications**, such as the requirement for counterpart funding.⁴⁵

To establish a resource schedule the list of activities, sub-activities and tasks elaborated in the activity schedule is being copied into a resource schedule form. Then in a first step the means (human and material resources) necessary to carry out the activities are specified. In a second step the cost of the means are specified following defined categories, such as⁴⁶:

- units
- quantities per defined period (e.g. quarters of a year)
- unit cost

On this basis cost per period and total project cost can be easily calculated. In addition a column can be included to specify the funding source to indicate the contributions of the different parties involved.

⁴⁵ Adapted from PARTICIP GmbH, p. 23.

⁴⁶ Adapted from European Commission, May 1999, p. 41.

Specifying first the means and then the costs of all sub-activities and tasks indicated in the activity schedule will allow to use simple formulae and calculate the total cost of a project. Attention should be paid whether the cost identified is covered through the financial resources available.

As simple as the mathematical part of calculating the costs at the end might be, estimating the costs for the respective means has to be based on careful budgeting, making use of professional know-how and experience. How realistically a project is budgeted will not only greatly influence the decision on whether or not to finance it, it will later on have a considerable effect on the implementation of the project.

2.4. Example of a Logframe Matrix

On the next pages a logframe matrix can be found as the summary of the illustration case. Means and cost have been left out that would have to be specified in a real case on the basis of the activities indicated.

The different levels of objectives can be found in the first column: in the first row to the right the development objectives, one level below, the immediate objective, again one level below the outputs and finally the activities. In order to be able to see which activities belong to which output (which activities will be carried out to achieve which output), the outputs are numbered from 1 - 4 and the activities related to each of these four outputs are numbered accordingly 1.1, 1.2. and so forth.

Project strategy		Objectively verifiable indicators	Sources of verification	Assumptions
Logframe Matrix		Project title: Reduction of the Pollution Load of the Wastewater Discharged into the Blue River Country: Xanadu		Estimated project period: 06/2000 –12/2001 Prepared on: March 2000
Development objectives:				
<ul style="list-style-type: none"> Biodiversity of globally significant aquatic life is conserved Living conditions of local people is improved 	<ul style="list-style-type: none"> The species x-fish, y-fish and z-fish returned into the Blue river 2 years after the project has started The income generated by the catch of y-fish has increased by 20 % 2 years after the project has started The rate of diseases amongst water users is reduced by 80 % 2 years after the project has started 	<ul style="list-style-type: none"> Biological Survey report Socio-economic Survey report 		
Immediate objective:				
<ul style="list-style-type: none"> Pollution load of wastewater discharged into the Blue river is reduced 	<ul style="list-style-type: none"> Organic pollution load is reduced by 30 % 2 years after the project has started The concentration of heavy metal compounds (Pb, Cd, Hg) in the Blue river section of the District is reduced by 75 % to meet the limits for irrigation water, used by the farmers of Blue village, 2 years after the project has started 	<ul style="list-style-type: none"> Environmental monitoring reports of the EPA 	Pollution through application of fertilizers/pesticides is reduced	
Outputs:				
1. Incentives for avoiding high pollution of wastewater are effective	<ul style="list-style-type: none"> 10 % of the companies in the district Blue river have used the incentives to invest in environmental technologies 2 years after the project has started 	<ul style="list-style-type: none"> Survey report 	Upstream water quality remains stable	
2. Legal regulations covering the discharge of wastewater are improved and followed	<ul style="list-style-type: none"> The limits for heavy metal compounds in the wastewater are reduced by 50% 9 months after the project has started Environmental monitoring reports are submitted quarterly by all companies in the District 15 months after the project has started 	<ul style="list-style-type: none"> New catalogue of environmental regulations Quarterly environmental monitoring reports 	The control agency applies the new catalogue consequently	
3. Wastewater treatment capacities are increased	<ul style="list-style-type: none"> The WWTP 1 and 2 are rehabilitated and the treatment capacities are increased by 30 % after 9 months after the project has started 1 new WWTP with a treatment capacity of 500 m³/day is completed and operational 15 months after the project has started 	<ul style="list-style-type: none"> Rehabilitation report Construction report 	The Bureau of Statistics provides correct figures about the population and the population growth in the District	
4. Sewer network is rehabilitated	<ul style="list-style-type: none"> 95 % of all households are connected to the sewer network 18 months after the project has started 	<ul style="list-style-type: none"> Rehabilitation report 	New settlements are strictly planned and controlled by the Landuse Planning Department	

Logframe Matrix	Project title: Reduction of the Pollution Load of the Wastewater Discharged into the Blue River	Estimated project period: 06/2000 -12/2001	
	Country: Xanadu	Prepared on: March 2000	
Project strategy	Objectively verifiable indicators	Sources of verification	Assumptions

Activities:	Specification of inputs	Specification of costs	
1.1. Analyse environmental investments of companies 1.2. Identify relevant clean technologies 1.3. Design incentives for investments in the field of clean technologies 1.4. Test incentives 1.5. Adapt incentives 1.6. Apply the incentive system in District Blue River 2.1. Create a legal commission 2.2. Analyse the compatibility with other regulations 2.3. Prepare the text for a new catalogue of environmental regulations 2.4. Pass the new regulations 2.5. Inform all companies and provide the standard reporting forms 2.6. Control single companies unannounced 3.1. Obtain design and rehabilitation specifications 3.2. Launch tender procedure 3.3. Evaluate tenders and sign contracts 3.4. Monitor construction work 3.5. Develop maintenance plan 4.1. Analyse the actual status of the sewer network 4.2. Prepare rehabilitation plan 4.3. Launch tender procedure 4.4. Evaluate tenders and sign contracts 4.5. Monitor construction work 4.6. Develop maintenance plan			

Preconditions:
1. Foreseen budget for environmental measures is available in time

2.5. Limitations and Risks

There are a number of risks involved when the LFA is applied improperly. In addition there are a few aspects that have been criticised as conceptual weaknesses or limitations of the LFA. In the following these risks in the application and conceptual limitations of the LFA are summarised under three key words:⁴⁷

“Logic-less frames”:

One improper use of the LFA is that often only a **matrix** is drawn up, and the matrix is drawn up **after** the project has already been designed. In this case the LFA isn't used to **guide** the whole project design process. Instead only the format used to summarise the findings of the LFA process is applied to describe a pre-existing design, rather than create a logically solid one. The result is a “filling in the boxes – exercise”.

“logic-less frames”

The reasons for carrying out such “filling in the boxes – exercises” sometimes might be lack of understanding⁴⁸, (mistaking the **matrix** for the **approach**) or the fact that using the LFA is a requirement set out by a funding agency. Asking for the reasons why logframes have often only been used where external funders demand them Des Gaspers offers the following answer hinting at one of the requirements to follow the LFA process: “Logframes are often only used when demanded by an external authority because they require a high degree of consensus about what is feasible and valuable. When this consensus is missing then only the pressure of a dominant authority, the controller of funds, may lead to it being declared. But without first a shared analysis of a situation the result is likely to be an illogical project matrix.”⁴⁹ Sharing views, discussing them – coming to a common vision of e.g. a problem situation can be a time-consuming process, and it isn't guaranteed that a vision shared by all can be achieved. The LFA as a process requires the facilitation of communication as it is based on stakeholder involvement. Integrating stakeholders into the stages of a project may be difficult and/ or complicate, depending on a project's environment. The LFA does not offer tools to dissolve those difficulties. **If** applying the LFA as an approach stakeholders form an integral part of the LFA process. **Skipping the process** to get easier to the “**product**” ignores the internal logic and philosophy of the approach. And the “**product**” will only be as good as the analysis and planning process undergone beforehand has been.

⁴⁷ On the basis of the criticism by: Eggers, Hellmut W., p. 71; Gasper, Des, p. 75ff., Jackson, Bill, p. 2.

⁴⁸ Jackson, Bill, p. 2.

⁴⁹ Gasper, Des, p. 76.

"Lack-frames":

One of the LFA's limitations criticised is that in complex and sometimes even relatively simple project settings **the logframe can be too simple** for describing the project design so that important aspects are left out. The logframe matrix in this case is no summary of a project's key aspects but rather a lack-frame. The logframe matrix might be complemented with additional important information, but by doing this the idea of the matrix as a project summary providing a rather quick overview of the most important aspects of a project does not hold true any more.

"lack-frames"

"Lock-frames":

Another risk with the application of the LFA that frequently occurs is the **freezing of analysis and planning results** derived from an initial situation by leaving a logframe matrix, once it has been drawn up, as it is **without updating** it. The result is a "lock-frame" that limits flexibility. As mentioned a number of times during the introduction to the LFA, the logframe matrix should always reflect changes (be it in the analysis of the project's environment, concerning the objectives envisioned for the project, etc.), and stay flexible.

"lock-frames"

Another difficulty with applying the LFA possibly resulting in lock-frames concerns the work in environments of great uncertainty and change. As Des Gaspers writes: "A generally doomed response is to try to plan and control so effectively that uncertainty and external changes are tamed. Lock-frame can result: a logframe is stuck too doggedly despite becoming superseded, and then survives later because nobody pays attention any more"⁵⁰.

With respect to single LFA tools the **focus on problems** during the initial situation analysis is often criticised. First, because this entry point to analysis might be unacceptable in cultures that consider it inappropriate to discuss about problems or formulate criticism openly. Second, because the initial focus on problems might limit the vision of potential objectives and third, because beginning with the problem analysis might not be suited to situations where there is a high degree of uncertainty involved or where agreement cannot be reached on the main problem. As writes Bill Jackson: "The logframe approach assumes the nature of the problems can be readily determined at the beginning of the planning process. This does not allow for an exploratory style project that seeks to learn from experience."⁵¹

problem focus

⁵⁰ Gaspers, Des, p. 76.

⁵¹ Jackson, Bill, p. 2. On the criticism that LFA can restrict learning (in that it neglects unintended and unforeseen effects and unintended routes by taking the logframe - as a description of the intended routes for achieving intended effects - as the basis for all later monitoring and evaluation, possibly producing a "tunnel vision") and the neglect of values about process as compared to values of products (reflected in the step wise hierarchy of objectives, matching "thinking from the profit sector") also see Gaspers, Des, p. 76 f.

To counteract the limiting effect of a focus on problems during the initial situation analysis to a certain degree the analysis of **potentials** can be included in the situation analysis. This should help to give a more dimensional picture of an existing situation. How then to proceed in a cultural context, in which problems are not openly discussed? Being familiar with the "culture" as much as possible would be a prerequisite to react adequately to e.g. think about what might be problems, whether problems are perceived at all as a dominant feature, who might be willing to share views about problems with whom or what might be an alternative to problem analysis as an entry point for analysing a situation, etc. The difficulty to perceive problems and discuss them openly is not bound to "cultures" in the sense of countries, regions, etc. sharing the same traditions, values, languages, beliefs and the respective forms of expression. – It is also bound to "cultures" such as organisations or institutions. Here again, knowing the "culture" can be of help as described above, and facilitation and mediation skills are required to carefully facilitate the process.

The LFA does **not** assume that the "nature of all problems" can be readily determined at the beginning of the planning process. The LFA does not define what the "true nature of a problem" is – as this obviously depends on perception and the focus of an analysis. A "problem" might be, that there is not enough information available on a situation that is undesirable or critical, or might very soon turn critical. The problem analysis at this stage might focus on the reasons for the lack of information and the objective of the following study or even project would then be to collect the information needed – identify existing sources of information, generate information, etc.

The results that can be achieved by applying the LFA strongly depend on **how** this set of tools is being applied. This includes the fundamental decision whether or not to use it at all.

2.6. LFA in Project Management

This introduction to the Logical Framework Approach has been focusing on its role in project design. Its applicability though is not restricted to project design but encompasses as well **project management** during implementation, monitoring and evaluation.

the LFA as a set of tools for project management

One of the major tasks of project management during implementation is to verify that a project is actually achieving the intended objectives. An important means to do that is **monitoring**⁵². Monitoring is a **continuous and systematic collection and analysis of information to measure the progress of a project towards expected results**. Through monitoring project managers (and others involved) are provided with regular feed-back on actual project progress as compared to planned progress.

⁵² The monitoring described here is project-level monitoring.

Generally the “feed-back” is provided through reports that contain the essential information timely and systematically.⁵³

Indicators and **milestones** form the basis for monitoring as they show to which extent a project’s intended objectives (first in the sense of progress) have been achieved. The logical sequence laid down in the LFA between activities (that, carried out lead to) – outputs (that, achieved will lead to the achievement of the) and immediate objective helps to choose monitoring indicators. The milestones defined in the activity schedule (based on the logframe matrix) form part of the basis for monitoring.⁵⁴

the LFA’s role
in monitoring

Monitoring helps to see whether objectives are achieved as intended, or whether there are **deviations** from the initial plan. If this is the case it can be analysed why there are deviations, what the problems are in implementing the project as intended and what could be done to either keep the project on the planned track or, if necessary, what could be alternatives to the original plan. The transparency and structure provided through the application of the LFA during project design, laying open the basis for the planned action (analysis of initial situation) and the rationale behind the project design (logical sequence between different levels of objectives and the role of external factors) can facilitate considerably project monitoring.⁵⁵

In the UNDP/GEF context, Tripartate Annual Reviews (TPRs) are the most significant monitoring tool. TPRs are high policy level meetings of the parties directly involved in the project to assess the progress of a project and take decisions to improve the design and implementation of the project in order to achieve the expected results. Given that the logframe matrix is not a rigid framework, but a dynamic one, the TPR represents an unique opportunity to revisit the defined objectives, indicators, and assumptions and refine them as necessary.

Whereas monitoring is a continuous process throughout project implementation, **evaluations are periodic assessments of project performance and impact** to review a project’s actual achievements against the achievements planned and to document the lessons learned for future improvement.⁵⁶

Coming back to the reasons described at the beginning of this reader for the introduction of the LFA at U.S.A.I.D it was a response to major problems encountered with project evaluations. These were, to shortly take up the three key weaknesses stated earlier: **vague planning** (no clear picture of what a project would look like if it were successful; multiple objectives, not

⁵³ UNDP, p. 5.

⁵⁴ Also see European Commission 1999, p. 55 – 62.

⁵⁵ Also see Danida, p. 110ff.

⁵⁶ UNDP, p. 5. Monitoring is generally done by project managers themselves whereas evaluations are carried out by external personnel independent from the project.

clearly related to the project activities), **unclear management responsibilities** (external factors outside the control of managers not stated as such - difficulties in assigning responsibilities for outcomes) and **evaluations turned into an adversary process** (evaluators used their own judgement to assess projects, the results would rather become the basis for arguments about what was desirable and undesirable instead of fostering constructive actions for project improvement).

That the LFA has been conceptualised as an attempt to meet these weaknesses can be clearly seen looking at the structure (and especially the rationale behind it) of the LFA. The steps involved in an evaluation exercise closely follow the hierarchical objective structure of the project design. By following this systematic approach all aspects of the project's achievements are evaluated. **Actual** financial inputs are compared with the **planned** financial inputs, the **actual** schedule and completion of activities is compared with the **planned** schedule and completion, **indicators** are reviewed to see how activities were transformed into outputs, whether the immediate objective has been achieved and whether the project has contributed to the achievement of the wider development objective.⁵⁷ As within a logframe matrix it is clearly stated what a project wants to achieve and how (project design) the focus of an evaluation lies now rather on the assessment of these intended objectives and on the lessons learned.

the LFA's role
in evaluations

2.7. Summary

The LFA is an open set of tools for project design and management. It entails an evolutionary, iterative analytical process and a format for presenting the results of this process, which sets out systematically and logically the project or programme's objectives and the causal relationships between them, to indicate how to check whether these objectives have been achieved and to establish what external factors outside the scope of the project or programme may influence its success.⁵⁸

The LFA can be a frame to help logical work but it can't be a substitute for that work⁵⁹. It consists of two phases: an analysis and a planning phase. Although the planning phase is based on the findings of the analysis phase, both phases may be applied not only once, but several times at different stages of the project cycle with different depths of analysis and degree of detail. The same is true for the different set of tools available in each of the phases, e.g, stakeholder analysis, problem tree, objectives, indicators, etc.

⁵⁷ European Commission 1999, p. 64 ff.

⁵⁸ Commission of the European Communities, February 1993, p. 18.

⁵⁹ Gaspers, Des, p.77.

It should be stressed that the LFA is not only a matrix, not a single workshop, but an approach applied throughout the GEF project cycle.

The LFA starts with the **profound analysis of an existing, undesired situation** as a basis for later planning. What makes a situation undesirable has to be analysed together with the stakeholder involved: during the analysis phase representatives of the different stakeholders are brought together and consulted in order to be able to define the existing problems (first step of the analysis phase), to be able to later on analyse objectives on that basis (second step of the analysis phase) and to finally analyse what alternative project strategies exist (third step of the analysis phase).

Stakeholders and projects affect each other – in positive or negative ways. It is crucial to start identifying and analysing the relevant stakeholders, their interests, problems, potentials, etc. at an early stage to then integrate them accordingly into the project design and management.

The procedure for stakeholder analysis is quite undetermined and open. Stakeholder analysis is methodologically not integrated into the LFA sequence. The findings of the stakeholder analysis rather accompany the LFA process and can be pictured as a “transparency” that evolves throughout the LFA process and should at the same time be used as an overlay for further elaboration and crosschecking during all LFA stages.

The main output of the LFA is the logframe matrix – it could also be called the final “product” of the LFA process. The matrix is being developed on the basis of the LFA tools applied earlier during the analysis phase:

Out of the strategy analysis (based on problem and stakeholder analysis and the analysis of objectives) the different levels of objectives are being transposed into the first column of the matrix (project strategy).

During the planning phase of the LFA it is further elaborated which external factors are crucial for the projects success (assumptions), where to find the information required to assess its’ success (indicators and sources of verification) which means are required to achieve the project’s objectives and what the project will cost. On this basis resource and activity schedules can be established.

It is true that the logframe matrix is comprised of 16 “boxes”, but it is not true that establishing a logframe matrix means to “fill in the boxes”. Behind every “box” stands careful analysis and logical reasoning that has to be pursued **before** filling in the boxes – which is only the final activity, a product - the summary of a longer process. LFA is **not a matrix** it **is an approach**. The quality of a project summary (presented in form of a matrix) always depends on the quality of the analysis work done before establishing the summary.

A logframe matrix provides a summary of the key information on a project. “Key information” means, that in general only the most important aspects are being included, without elaborating the operational details needed for further

planning and implementation. Activity and resource schedules are a means to provide the operational detail needed. Following the LFA sequence they are established on the basis of the logframe matrix. Having drawn up an activity schedule that specifies a project's activities in operational detail a resource schedule can be drawn up to elaborate on the costs of the means required.

Coming to the end of this introduction to the LFA it once more should be said that by applying the LFA as an open set of tools the effectiveness of projects can be improved by fostering transparency, structure, participation and flexibility in project design and management. **What** can be achieved by applying the LFA greatly depends on **how** it is being applied. It is crucial to use LFA in a **flexible way** and **adapt it whenever necessary**, e.g. by complementing it with other tools to meet specific circumstances and requirements. Applying the LFA flexibly and creatively, building on "experience, insight and reflexion" the LFA can be a "frame for logical work". Deciding on how to use the LFA includes the fundamental question whether to use it at all or to which extent. This decision has to be taken on the basis of an assessment of the frame-conditions and –circumstances of a specific project's setting and on the question which purpose the use of the LFA should serve.

"When we learn to drive a car, we begin – unlike in most development planning manuals – not with a list of the benefits of the method, or not only with that. We are immediately reminded or already aware that cars can be dangerous and must be used with care and skill; that styles of use must be different in different cases (highways, urban roads, dirt roads, wet roads, curving roads, night driving, snow, ice, etc.); and that for many cases other methods of transport or communication are better (like trams, bicycles, walking, telephones or e-mail). Similar critical good sense is needed with methods like Logical Framework Analysis and Project Cycle Management." ⁶⁰

⁶⁰ Gaspers, Des, p. 77.

3. APPLYING THE LFA FOR PROJECT DEVELOPMENT AND IMPLEMENTATION IN THE GEF-CONTEXT

In the GEF context, LFA tools may be applied at different stages of the project cycle. At each stage during project development and implementation LFA provides a frame and set of tools to analyse and plan the GEF project, helping to structure a complex set of interventions. Furthermore, the products generated by the LFA i.e. project strategy including clear objectives, indicators and assumptions, are facilitating the monitoring and evaluation.

The LFA methodology may be applied to a wide range of interventions and is to be adapted whenever necessary to meet specific circumstances and requirements. Different development institutions have different approaches to LFA, tailoring it to its needs by emphasizing some aspects or acknowledging certain limitations.

GEF projects differ from general development projects insofar as they exhibit **certain specific features** (e.g. eligibility criteria, incremental costs) that have to be taken into account in project design, planning and implementation. These GEF-specific characteristics are important to bear in mind particularly during the analysis phase of the LFA. In the GEF context, the problem analysis for example means focusing from the beginning on an undesired situation **within four specific focal areas**: biodiversity, international waters, climate change and ozone depletion. Furthermore, the problems must be of **"global significance"**. In the preparation of the objective tree and the subsequent strategy analysis the **incremental cost criteria** will largely determine the decision on which objectives will or will not be pursued within the framework of the project.

The different tools available through the LFA may be applied not only once, but **several times** at different stages of the GEF project cycle with **various degrees of depth, detail, and number of people involved**. For example, some of the tools in the planning phase such as stakeholder analysis, problem analysis or definition of objectives might be applied at the idea/concept paper stage by a reduced group of people using reports available and general knowledge of the situation linked to global environmental issues. At a later stage in project development such as PDF implementation, the same tools can be applied in a more rigorous way through meetings or consultations with stakeholders, surveys, or small workshops by the project team with the help of consultants in some cases.

Advancing through the several stages of the project development cycle the "results" of the application of the different LFA tools such as stakeholder analysis, strategy analysis, etc. are subsequently **reviewed and refined** to provide inputs for the final project brief/ document. This document is a programming instrument that reflects the outcome of the analysis and planning phases and provides a key reference for implementation. It specifies the goals and expected results of the GEF intervention as well as the

indicators by which progress or setbacks are to be assessed, the resources that are needed, and the management arrangements.

In the case of UNDP-GEF projects, once the project starts to be implemented, **Tripartite Annual Reviews (TPRs)** are the most significant monitoring tool. TPRs are high policy level meetings of the parties directly involved in the project to assess the progress of a project and take decisions to improve the design and implementation of the project in order to achieve the expected results. Given that the project planning matrix is not a rigid framework, but a dynamic one, **the (TPR) represents a unique opportunity to revisit the defined objectives, indicators, and assumptions and refine them as necessary.**

3.1. LFA in the GEF project cycle

The following table is meant to give an idea on how and when the LFA tools can be applied throughout the project cycle. It is not meant to give a comprehensive picture of the LFA's use for project development and management in the GEF, but to provide examples of practical applications of LFA tools at different stages of project development and also later during implementation.

	LFA tools								
	ANALYSIS PHASE				PLANNING PHASE				
PROJECT CYCLE	Stakeholder Analysis	Problem Analysis	Objective Analysis	Strategy Analysis	Logframe Matrix				Means and Cost
					Project Strategy	Indicators/	Sources of verification	Assumptions	
PROCESS: DEVELOPING IDEA/ CONCEPT PAPER	Preliminary list of stakeholders	Problem 'bush' Analysis of an existing, undesired situation linked to global env. issues.	Expected outcomes	Linkage to national priorities	--	--	--	--	--
	Small group brainstorming.								
PRODUCT: CONCEPT – PDF REQUEST (if necessary) (1)	National level support	Justification	Project Objective	Eligibility Global benefits Description of PDF activities Description of PDF outputs	--	--	--	--	PDF Budget and Timetable Funds allocated for application of LFA tools such as consultations, ad-hoc meetings /workshops
	Project proponent & Country Office. One day working session.								

(1) Where project proponents have their own funds for project development or the level of project preparation is sufficiently advanced that GEF resources are not required to carry out further analysis or collect additional information for the purpose of preparing a project proposal, PDF resources might not be requested. In these cases all the LFA activities carried out during PDF stage are moved to the previous stage

PROJECT CYCLE	LFA tools								
	ANALYSIS PHASE				PLANNING PHASE				Means and Cost
	Stakeholder Analysis	Problem Analysis	Objective Analysis	Strategy Analysis	Logframe Matrix				
Project Strategy					Indicators/	Sources of verification	Assumptions		
PROCESS: PDF IMPLEMENTATION	Identification Categorization Detailed analysis Relation map	Problem tree (with stakeholders) Identification of root causes Threats/ barriers analysis	Objectives tree	"GEF eligibility" (thematic, spatial, temporal) Incremental cost Incorporation of lessons learnt from other projects	-Present results of analysis phase -Levels of objectives -Vertical and horizontal logic	Specific Measurable Attainable Relevant Trackable	Sources identified Costs of collecting information	Assessment of assumptions Killer assumptions	
	Informal meetings-consultations	-Consultations -Surveys by Consultants/project team -Participatory rapid appraisals			Preliminary preparation. Drafts Final workshop (3-5 days) Project team + stakeholders + facilitator.				
PRODUCT: PROJECT BRIEF/ PRODOC	Public involvement plan	Baseline course of action: -Threats -Underlying causes -Problem definition	Refined Objectives and outputs	Baseline programmes Alternative courses of action: -Outputs -Eligibility	FINAL PROJECT PLANNING MATRIX				Final Budget M&E Plan + Budget TORs

	LFA tools								
	ANALYSIS PHASE				PLANNING PHASE				
PROJECT CYCLE	Stakeholder Analysis	Problem Analysis	Objective Analysis	Strategy Analysis	Logframe Matrix				Means and Cost
					Project Strategy	Indicators/	Sources of verification	Assumptions	
PROJECT IMPLEMENTATION					Revisit defined objectives	<p>Continuos and systematic collection and analysis of information on indicators.</p> <p>Assess progress by comparing actual level achieved to target values and timeframes provided in the Indicators.</p>		Monitor that assumptions will hold/not hold	
					<p>-Continuous monitoring. Field visits</p> <p>-Annual Project Reports (APR)- for UNDP-GEF projects</p> <p>-Tripartite Annual Reviews (TPRs)-for UNDP/GEF projects.</p> <p>-Mid term and final evaluations</p> <p>-Project Implementation Review (PIR)</p>				

4. ANNEXES

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4.3. Glossary

Activities	What needs to be done to achieve the outputs of a project, making use of human, technical and financial inputs.
Activity schedule	In an activity schedule a project's activities are broken down into operational detail. An activity schedule lays open dependencies between activities; clarifies the sequence, duration and precedence of activities; identifies key milestones to be achieved; serves as a basis for project monitoring; assigns management responsibility and implementing responsibilities.
Analysis of Objectives	Analysis of Objectives describes a future situation that will be achieved by solving the problems identified during problem analysis. During analysis of objectives potential solutions for a given situation are identified. This involves the reformulation of the negative aspects ("problems") identified during problem analysis into positive ones (envisioned for the future, i.e. desired but realistically achievable). The rationale of the reformulation is to derive the objectives directly from the actual existing problems identified and not from elsewhere.
Analysis Phase	During the analysis phase a profound analysis of an existing, undesired situation is carried out (Situation/ Problem analysis and Stakeholder analysis), from which the analysis of objectives is deducted (identifying means to end relationships) and the different potential strategies to be pursued within the framework of a project or programme are identified.
Assumptions	Assumptions are external factors that lie outside the control of a project but have to be attained in order to reach the project's objectives. They influence or even determine the success of the project. The aim of specifying assumptions (and pre-conditions) is to identify and assess potential risks to and dependencies of the project right from the initial stages of project design, to support the monitoring of risks during the implementation

	of the project and to provide a basis for necessary adjustments.
Cost	Cost are the financial resources needed to carry out the activities identified to pursue a project's objectives.
Development Objective	The long-term global environmental benefits in the areas: Biodiversity, International Waters, Climate Change and Ozone Layer, to which the project contributes.
Horizontal logic	Within the horizontal logic of the logframe matrix indicators to measure progress and impact are specified and the sources or means by which the indicators will be verified.
Immediate Objective	Short term and clearly achievable purpose of the GEF intervention, i.e. conservation and sustainable use of BD, removal of barriers to energy efficiency and conservation, promotion of renewable energy and the reduction of degradation to the international waters.
Logical Framework Approach (LFA)	The LFA is an open set of tools for project design and management. It entails an evolutionary, iterative analytical process and a format for presenting the results of this process, which sets out systematically and logically the project or programme's objectives and the causal relationships between them, to indicate how to check whether these objectives have been achieved and to establish what external factors outside the scope of the project or programme may influence its success.
Logical framework matrix (logframe matrix)	The main output of the LFA is the logframe matrix. It is a format for presenting the results of the LFA as a process, and is developed on the basis of the LFA tools applied during the analysis phase. The logframe matrix serves as a summary of the key information on the project - it provides an easy overview that allows a quick assessment of the consistency and coherence of the project logic.
Means	Means are the human, material and service resources (inputs) needed to carry out planned activities and management support activities.

Milestones	Milestones define targets to be achieved by the activities and provide the basis for monitoring. A simple milestone is the completion of a task to a planned date. In an activity schedule the activities, sub-activities and tasks are listed in a consecutive way, therefore accomplishing a certain task in time can be seen as a milestone on the way to achieving outputs.
Objectively Verifiable Indicators (OVIs)	Objectively Verifiable Indicators (OVIs) are specific and objectively verifiable measures of change or of results as a consequence of project / programme activities. They provide the basis for performance measurement and are useful to convey to others what the project tries to achieve (transparency).
Objectives tree	The objectives tree is used as a tool for the Analysis of Objectives: within the "tree" the objectives are structured in a hierarchical order and the former cause-effect relationships between the key problems identified are turned into means-end relationships between objectives (what needs to be done to achieve what?).
Outputs	Specific products and services to be provided by the project to the project direct beneficiaries necessary for achieving the immediate objectives. Typically relate to reducing identified pressures or threats to the environment through capacity development, awareness raising, formulation and review of policies and legislation, fostering adoption of sustainable livelihoods, or the promotion of innovative financing mechanisms
Planning Phase	The planning phase encompasses the establishment of a logframe matrix on the basis of the LFA tools applied during the analysis phase, and subsequently the elaboration of activity and resource schedules.
Potential	In some organisations the analysis of potentials forms part of this initial analysis phase. It is meant to add to the picture of the problems in a given situation resources or opportunities (potentials) that might help to

	<p>solve problems. Generally different types of available resources such as natural resources, capital, infrastructure and labour force and other kind of opportunities are considered to be potentials. They might later on be utilized to achieve objectives.</p>
Pre-conditions	<p>A pre-condition is like an assumption – that means it is an external factor that lies outside the control of a project but has to be attained in order to reach the project’s objectives – only that it is a condition that must be fulfilled or met before project activities can start.</p>
Problem Analysis	<p>During problem analysis as part of the initial situation of an undesired situation that makes an intervention (project) necessary, the negative aspects of the existing situation are analysed. Key problems are identified and the causal relationship between them.</p>
Problem tree	<p>Drawing up a problem tree is the visual tool used within the LFA for clustering the problems identified during the initial situation analysis by establishing a hierarchy of causes and effects between them.</p>
Project Strategy	<p>The project strategy is displayed in the first column of the logframe matrix and displays what the project intends to achieve and how by clarifying the causal relationships between the different levels of objectives.</p>
Resource schedule	<p>Resource schedules provide the basis for the planned mobilisation of (external and local) resources. They facilitate results-based budgeting and the monitoring of cost-effectiveness. Resource schedules also identify cost implications, such as the requirement for counterpart funding.</p>
Sources of Verification (SoVs)	<p>Sources of verification (SOVs) describe where and in what form to find the necessary information on the achievement of objectives (indicators).</p>
Stakeholder Analysis	<p>Stakeholder analysis encompasses the identification and analysis of relevant stakeholders, their interests, problems, potentials, etc. It is important to start with</p>

stakeholder analysis at an early stage as part of the situation analysis in order to be able to integrate the stakeholders accordingly into the project design and management.

**Strategy Analysis
(Analysis of
Alternatives)**

The final stage of the analysis phase involves the identification of possible solutions that could form a project strategy and the selection of one or more strategies to be followed by the project. During strategy analysis (or "analysis of alternatives") a decision is being taken on which objectives **will** and which objectives **won't** be pursued within the frame of the project.

Vertical logic

Within the vertical logic of the logframe matrix the indicators to measure progress are specified and the sources/ means by which indicators will be verified are identified.