ZOPP

An Introduction to the Method

COMIT
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0. ZOPP Overview

0.1 Elements and Application of ZOPP

0.1.1 What is ZOPP

- ZOPP is the acronym for the German expression **"Zielorientierte Projektplanung"** or objectives oriented project planning. It is a planning methodology (a set of instruments and procedures) for addressing the planning function in the process of managing a development project through its life cycle.

- Planning is the anticipation and scheduling of future actions, (or interventions) together with the necessary disbursement/utilisation of resources, which are directed towards the attainment of pre-determined objectives

- As a planning method, ZOPP concerns itself with

  - a systematic analysis of the situation in which intervention is to be made, so as to have an understanding about how the salient elements in the situation are inter-linked;
  - a transparent identification and assessment of alternative intervention measures and points, lead up to the selection of preferred intervention options
  - scheduling of intervention measures and resource provision/utilisation towards the attainment of pre-determined and desired objectives
  - a systematic differentiation between intervention objectives which are attainable within the responsibilities/authority of project teams (given their resource and other frame-conditions), and those intervention objectives which can only be attained when other frame conditions become favourable.

- The ZOPP approach to planning is participatory is in its application enabling respective stakeholders in an intervention initiative to undertake joint-planning, consultative/transparent decision-making and steering/control of the implementation process. The essential elements of ZOPP - teamwork, visualisation and facilitation - serve to improve communication and co-operative among stake -holders in a project context.

- The **ZOPP Elements**, as presented in this manual, incorporates changes and developments in the method and addresses the major criticisms of the method from those who have been applying the method in practical project planning all over the world.

These Criticism have concentrated on the following main points:

- -loss of management orientation because of the schematic equivalence given to: management = planning = ZOPP;
- -the limitation of the ZOPP method to the “ZOPP workshop” and the ritualistic implementation of the method’s individual steps during such planning event;
- -the rigid application always taking the same “path through the box of tools”, which was considered to be urgently in need of complementation;
- -mechanistic-instrumental understanding of the analytical steps;
- pseudo-participation, orchestrated through the invitation of illiterate farmers and other representatives into a highly intellectualised, "above board” discussion in ZOPP workshops
- the responsibility to steer the basic management function of planning was transferred to external facilitators.

The aim of these criticisms was and is to recall the **central aspects of the ZOPP method,** which are its prime quality features, into the foreground, exploiting fully these qualities through flexible application, i.e.:

- active involvement of the affected people and the most significant important stakeholders in an iterative process of clarification, consensus building and decision-making;
- clear structuring of this process
- realistic planning, involving all those variables identified as being significant;
- transparency in all steps of planning and decision-making;
- dynamic understanding of planning: the project planning matrix should not be seen as a blueprint, but an orientation for objectives-oriented steering which needs to be updated on a regular (“rolling”) basis;
- ZOPP as an "open system" which allows and demands the involvement and use of other useful analytical instruments (e.g. rapid appraisal techniques) and decision-making tools.

Further refinement process as in the ZOPP method have concentrated on the following aspects:

Integrating the ZOPP method as a planning tad into the more comprehensive PCM orientation framework. It is emphasised that a more flexible use will underpin the high standards achieved through using ZOPP. The issue of genuine involvement of affected persons and major participants takes on priority importance.

Planning and plans must be used in a more professional manner. The process character of planning as a primary function in the project cycle which must be continuously taken care of, has to crystallise more strongly.

The project design issues which are related to organisations (implementing structure, actor constellation and the involvement of additional co-operating partners) must become a concern which should be taken up with equal importance in the planning process as the clarification of the logical structure of the project (PPM).

The ZOPP method must be supplemented by suitable methods to deal with the analysis and assessment steps.

0.1.2 Strengths of ZOPP

Using ZOPP in a meaningful way will help to

- define common and definite development objectives
- improve communication and co-ordination between co-operating organisations, central offices, projects, and beneficiaries by means of joint planning and transparent documentation of proceedings based on a joint understanding of terms and concepts
- encourage all important actors concerned to participate in planning
- clarify the scope of responsibility for all actors concerned thereby encouraging accountability, ownership and sustainability
- provide indicators for steering, monitoring and evaluating the intended development process
- improve the implementability of projects, and consequently their impact for the intended beneficiaries.

0.1.3 Major Concepts and Instruments of ZOPP

- The effectiveness of ZOPP is determined by the following features
- guidance by development principles, especially. in conceptualising the project interventions
- a process oriented approach
- a set of interrelated instruments which is open (and requires) to be complemented by other planing methods
- a team approach to planning to counterbalance sectoral or professional egoism
- attempt to achieve meaningful compromises in case of divergent opinions, expectations and interests
- techniques to enhance information flow and communication.

0.1.4. The instruments of ZOPP pertain to four areas:

- **analytical instruments**

Situation Analysis, comprising
- analysis of the actor constellation
- objectives'/visions' analysis problem
- analysis of potentials

Analysis of Alternatives

Delineation of Guiding Objectives (Development Goal and Project Purpose)

- **instruments for conceptualising interventions**

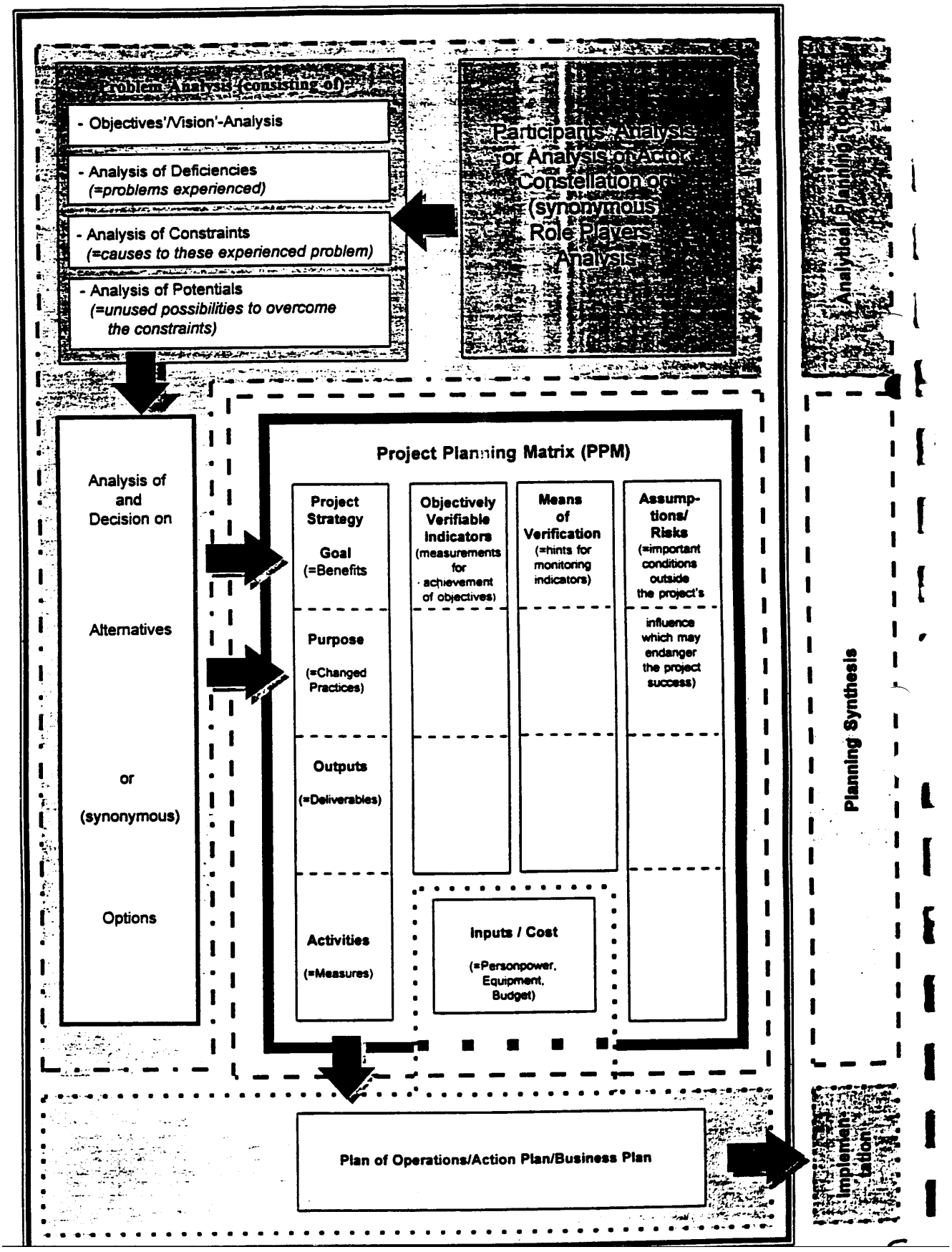
- **planning synthesis: the Project Planning Matrix (PPM)**

  Project Strategy (descriptive summary)
  Indicators
  Assumptions/Risks/Frame Conditions
  Means of Verification/Hints for Monitoring

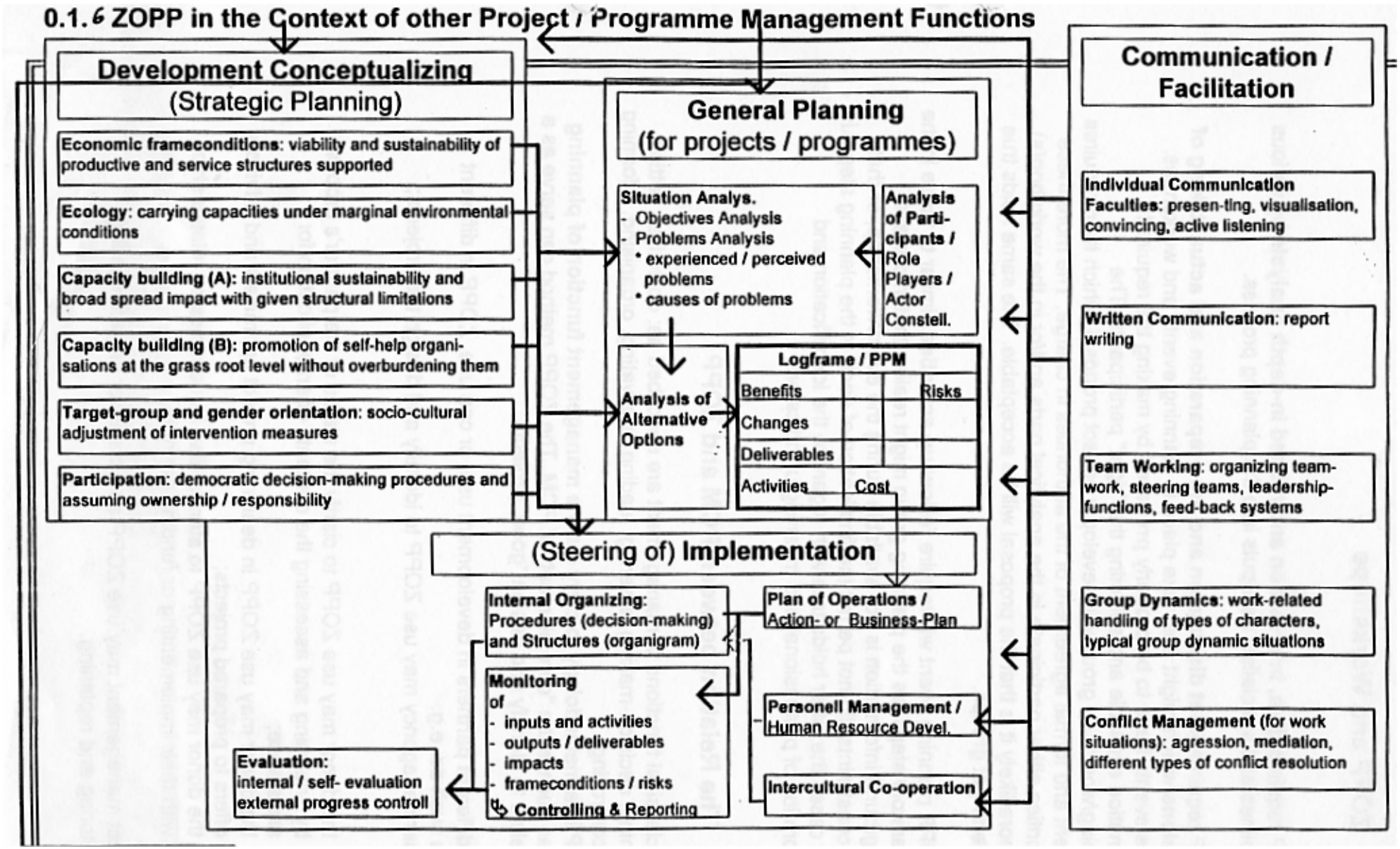
- **operational planning: Plan of Operations (PlanOp).**

(the figures on the next pages portray the interrelationships).

0.1.5 Overview of ZOPP Instruments



0.1.6 ZOPP in the Context of other Project / Programme Management Functions



0.2 ZOPP and Workshops

ZOPP requires data, information and related in-depth analysis by various disciplines and specialists as inputs into the planning process.

ZQPP requires joint discussion and the preparation and actual taking of decisions which might best take place in planning events and workshops. These events have to be properly prepared by making the required information available and selecting the “right” participants. The planning/workshop group will develop a project proposal which then requires consent and formal agreement of the authorities in charge. The more these authorities either participate in the analytical parts and/or in the workshop(s), the more likely it is that the proposal will be acceptable. The same holds true for the target groups.

A ZOPP planning event will require **follow-up activities** similar to those in the preparatory steps, as the planning group might realise that important background information is not available during the event/workshop, or that time constraints did not permit the finalisation of each of the planning steps. In most cases the latter holds true with regard to the identification and elaboration of professional and meaningful indicators.

0.3 The Relation between PCM and ZOPP

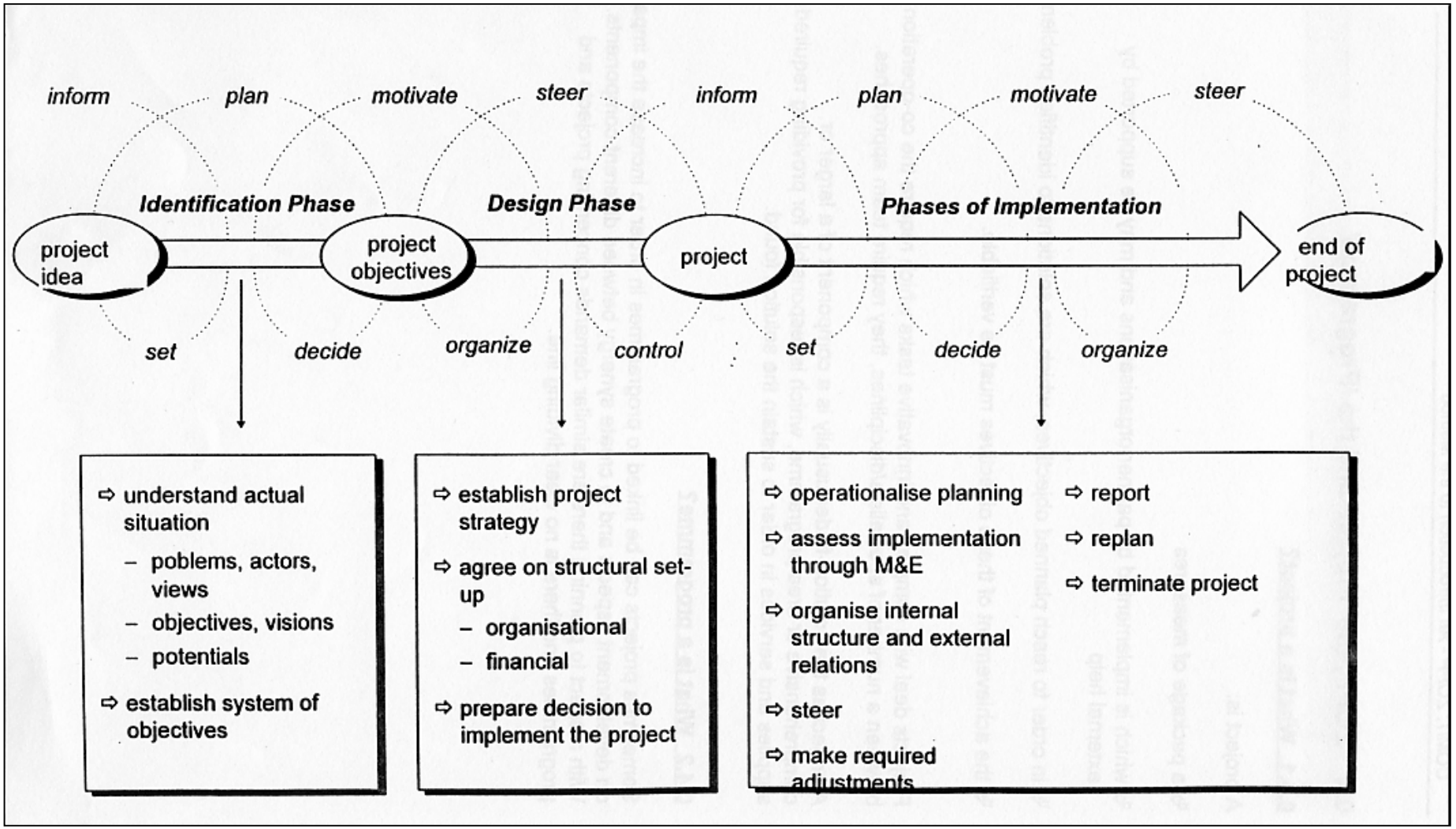
The classical functions of management are described as: objectives setting, planning, decision-making, steering, leading, motivating, organising, informing and controlling.
ZOPP is a methodology to carry out the management function of planning and as such is the “core element” of PCM. The ZOPP method can serve as a guideline to identify and design “good” projects.

The different partners in development use, or can use, ZOPP in different ways such as: e.g.
the partner agency may use ZOPP to identify and design the projects;

- the donor may use ZOPP to clarify the status of the partner’s proposal by analysing and assessing the contents of an application for assistance;
- the donor may use ZOPP in designing project appraisals and advisory offers to prepared projects;
- the donor may use ZOPP to standardise its commission relationships with their implementing or funding partners

project management may use ZOPP as a basis for project steering, monitoring and replaning.

0.4 Functions and Tasks of Project Planning



0.4 ZOPP, the 'Project' and the 'Programme'

0.4.1 What is a project?

A project is:

- a package of measures
- which is implemented by partner organisations and may be supported by external help
- in order to reach planned objectives, which are solutions to identified problems;
- the achievement of these objectives must be verifiable.

Projects deal with complex and innovative tasks which require the co-operation between a number of specialists/disciplines, they require team approaches.

A project as the solution-finder usually is a component of a larger or comprehensive or area programme, which is responsible for providing required supplies and services in order to sustain the solution found.

0.4.2 What is a programme?

Sometimes projects can be linked to programmes in order to increase the impact on development aspects and to create synergy between different components. With respect to planning there are similar demands concerning projects and programmes and there is no clear dividing line.

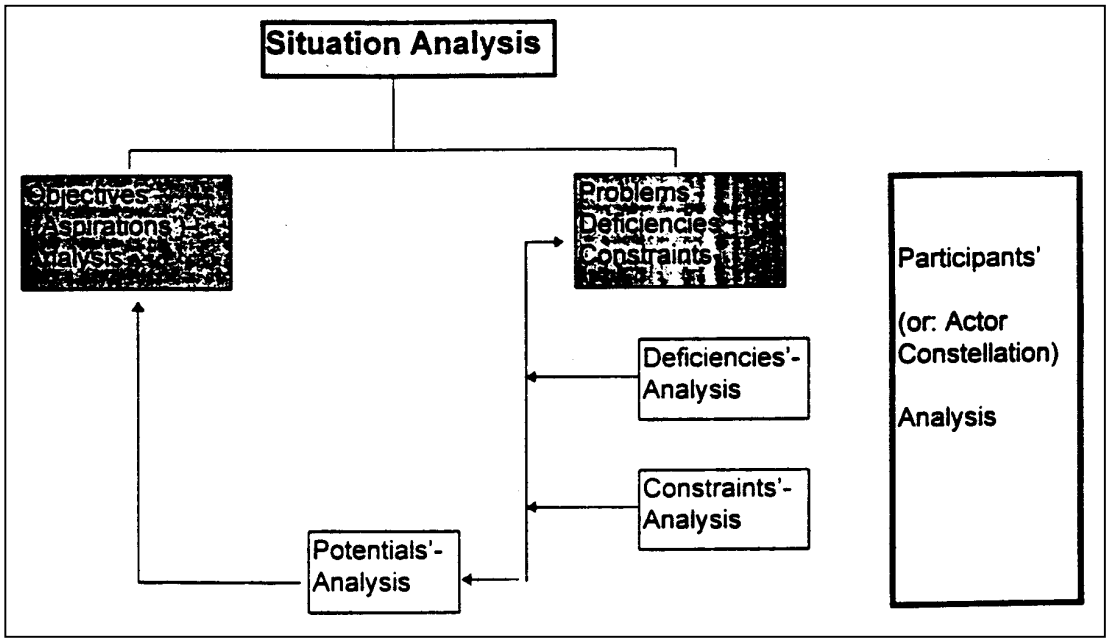
1. Situation Analysis

1.1. Overview

The analysis of a given situation is a substantial part in different planning methods. The actual state of affairs is to be analysed with respect to a project or given issue. In our context, the situation analysis is focussed on problems, stakeholders and their social environment. It is an attempt to understand the system which determines the existence of the problems.

A situation analysis is an iterative process with different possible entry points. The sequence of the single elements is to be decided in each case according to its practicability. The issues to be tackled, as well as the scope and the depth of analysis depend on the situation to be analysed. It is not the instruments which determine the analysis, but the interests-guiding the analysis which determines the choice of tools.

As problems are always connected to unfulfilled objectives, a situation analysis comprises of an Objectives'- as well as a Problems-Analysis. And as it is always people's problems and objectives which make up a situation, the analysis includes a Participants'-Analysis.



2. Participants' Analysis

Analysis of the Actor Constellation

2.1 Overview

2.1.1. Why a Participants' Analysis

The Participants' Analysis aims at adapting/adjusting the project design to the specific framework of the agencies involved in a project and the different target groups, who are connected with or affected by the project. Therefore, the Participants' Analysis has to identify

- those/whose problems are to be tackled;

- agencies which implement measures

- those who supervise the project and carry overall responsibilities.

- strategic groups (i.e. those who are of crucial importance for the success of a project and/or who are strategically positioned to jeopardise it).

Projects are thus influenced by many actors. Their different interests, potentials, deficiencies and other characteristics play a role in the process of designing and implementing a project.

It was a frequent experience
- that influential groups were not sufficiently considered in the planning, and hence caused disturbances in the implementation.
- that planners had false impressions about point of views and interests of others.

Therefore it is unquestionnable necessary to ask and communicate with those who are concerned. Thus it is usually necessary and expedient to analyse participants in a project as part of the planning process.

2.1.2. Points to be Considered

The participants' analysis aims at adapting/adjusting the project design to the specific framework of the agencies involved in a project and the different target groups who are connected with or affected by the project. Therefore the following points are to be considered in a participants analysis:

- The social structure and the hierarchy of power

The focus of attention of a participants' analysis are the most important actors of a given situation or project, their interests and their objectives as well as their relation amongst each other. Center of interest is the social reality and the hierarchy of power.
Important actors are not only the beneficiaries and organisations involved but also those who are negatively affected.

- The people concerned have to have their say.

Women and men quite often have different spheres of action and perception of the reality. Men f.i.reject a new water supply system, because they are to

pay for the costs of the construction. Women, however, would welcome such a project, because it reduces their workload. In order not to neglect the interests of women, planners should put an effort in letting women express themselves.

Furtheron planners are to distingush between the active participating population and those who are concerned in a more passive way. Many projects have the tendency of making those, who are concerned to participants.

Participants do not act in a vacuum but are integrated in their specific social conditions. This has to be considered in the analysis. Otherwise one risks to work only with a special selection of people and create an “island of the lucky ones”. This island will be destroyed by stronger forces of the society after the withdrawal of the external support.

2.1.3 Definition

The Participants' Analysis is an analysis of the *problems, fears, interests, expectations, restrictions and potentials* of all

- important groups
- organisations and institutions
- implementing agencies
- other projects and
- individuals

who may have an influence on a situation/(intended) project or are themselves affected by it. Those analyzed in detail should be limited to those who are perceived to

- be able to contribute to questions to be answered
- be important with regard to decisions to be taken.

‘Participants’ basically means:

- all those who are finally targeted by the project’s services and intended effects; they can be envisaged beneficiaries or affected in one or another way (may be also negatively); they can be individuals, groups (informal/formal), family units, cultural units, socially different strata, prc~uc3rs (peasants, farmers, workers, craftsmen, traders, other professional groups, etc.), urban or rural dwellers, migrants, etc.

- all those who are service or implemen[t]ing agencies in the context under consideration and its frame conditions they can be directly involved in the project or a larger programme; they may se affected by the project, or they can be supervisory or policy making bodies; they can be governmental and nongovernmental organisations, private business units, institutions, counterpart personnel, local and external experts, decision-makers, etc.

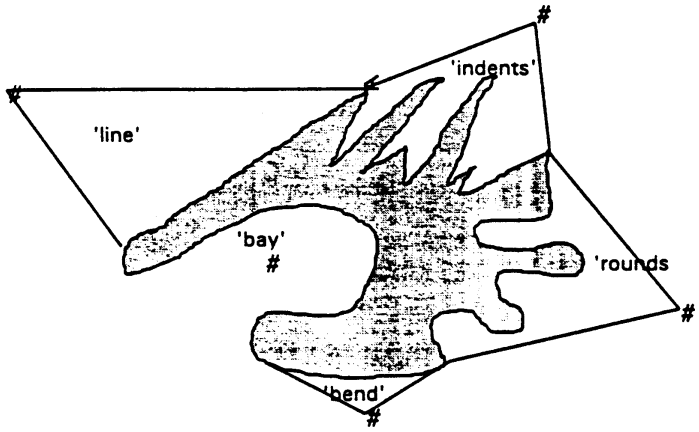
2.1.4 Information Basis

It is obvious that sufficiently precise information of the sizes of groups or organisations/institutions, their power and power-base their detailed problem situations and their proven interests (etc.) cannot normally be provided in a workshop without preparation of data before and Thus the Participants' Analysis is an adequate forum for summarising and presenting information which has to be provided by other (auxiliary) analyses like large groups analysis and institutional analysis. The Participants' Analysis can not substitute empirical analyses. A sketchy Participants' Analysis without such empirical evidence, especially for envisaged beneficiaries, may just be tentative/temporary.

On the other hand, empirical analyses - often carried out by professionals (e.g. anthropologists, sociologists, specialists on organisation) - should not substitute a Participants' Analysis. The planning workshop team (or other qualified teams) will be able to perceive aspects other than those identified by the professionals.

In a Participants' Analysis one consciously takes different perspectives:

observers view the same matter (e.g. an island from a boat) from different perspectives and thus may see it as differing things:



A Participants' Analysis enables the planning team to step into the shoes of different actors in the situation under scrutiny and understand the divergent perspectives, and thereby form a more complete impression of the issue being discussed.

2.2. How to conduct a participants' Analysis

The procedure for a Participants' Analysis is fairly open and undetermined. Generally, there are two phases foreseen while conducting a Participants' Analysis:

- phase of collection of 'participants' and their characterisation

- phase of analysis of each individual group identified as crucial.

The degree of detail in theses phases depends on the information available (based as little as possible on speculation) and the need of the project for adoption of measures to different groups (on the institutional as well as on the grass-roots level).

Step 1 **identify** *all* groups, organisations, persons related to and affected by the situation under consideration

Step 2 **categorize** them (e.g. beneficiaries, functional groups, etc.)

Step 3 **characterize** them briefly

Step 4 **analyze**

- *their problems, needs and expectations or interests* (from the point of view or participants' with respect to a potential project)
- *their weaknesses, constraints and potentials* (from the point of view of a potential project with respect to participants)

(proceed by columns, cf. the matrix below)

- what have *they already tried* what do *they actually do* to overcome their constraints

Step 5 identify **consequences** for a potential project (e.g. specific approaches required, conflict areas, etc.)

Example: Public bus system in rural areas

Example: Public bus system in a rural district

Participants/their characteristics	**Problems/needs**	**Expectations/ Interests**	**Weaknesses/ Constraints**	**Potentials**	**Consequences for a project**
Bus Company (institution)	Loss of revenue/confidence in service	High utilisation rates of buses	Inefficient management (no flexibility)	High demand for transport service, if supplied according to demands	Improvement of the management
Passengers (envisaged beneficiaries 150.000 people per day)	Movement by public transport is unreliable and dangerous	- To be at the market as early as possible - To have enough space for transporting vegetables	No capital available to afford alternative means of transport	Politically influential on local level	Improve existing transport system
Bus-drivers (from various origins)	- Little incentives - Do not know traffic rules	Satisfactory working conditions	Dangerous driving (many accidents)	Willingness to better their reputation	- Training - Incentives system
Bus repair workshop	High ratio between qualified personnel and number of buses over-worked under poor condition service	Guaranteed jobs with less stress	Shoddy repair work	Technical know-how and facilities are available.	- Replacement of ageing buses - In-service training to improve workmanship.

2.2.1 Analysis of the individual strategically important groups

A detailed analysis of the identified strategic group will follow general categories of analysis and should be flexible to permit the inclusion of all important information.

It is useful to specify the angle/viewpoint, from which respective statements in the analysis are made: are they from the point of view of participants (their problems, their interests, etc.) or are they from the point of view of the prospective project (the participants' deficiencies concerning the project issues, their potentials for the project, etc.).

The categories which are often used refer to an interventionist thinking: if development is to be supported by a project, then what are the potentials, what are the constraints, and what consequences are to be drawn for a project design?

Examples for analytical categories are:

* Problems (problems in satisfaction of basic needs / in living conditions / with respect to environmental conditions)
* Interests, motives, attitudes (openly expressed or hidden interests, hopes, wishes, expectations, fears, apprehensions, reservations, opinions, prejudices, taboos, attitudes towards change/progress/work/strangers...)
* Potentials and constraints (knowledge, skills, behaviour, commitment, power, connections, possessions, capital, etc.)
* Quantitative dimensions can be added to the different descriptive statements from the point of view of the planning team.
* Implications for the project design (relation of project to group, general approach to the group, adaptation of measures to the requirements of the group, special measures for the group, no intervention but observation, connection to other groups)

These specifications in the analytical categories may not be used comprehensively in the Participants' Analysis of every project. They should serve as a source of ideas to fill general headline-categories for each group analysed with specific content.

1 CHARACTERISTICS OF EACH GROUP / PARTICIPANT / PARTY INVOLVED - WHAT, WHO, HOW ARE THEY:

- social characteristics (size, members, social background, religion, cultural aspects,
- status of a group (formal, informal, other)
- structure (organisation, leaders, etc.)
- attitudes (friendly, neutral, hostile towards other groups / organisations / agencies, etc.) and values

2 PROBLEMS AND INTERESTS (FROM THE POINT OF VIEW OF DIFFFRFNT PARTICIPANTS

- unsatisfied needs, problems, fears, constraints

- interests (openly expressed, hidden, vested)
- motives (hopes, expectations, wishes)

3. POTENTIALS AND DEFICIENCIES (FROM THE PROSPECTIVE PROJECT'S POINT OF VIEW)

- strengths of the groups (resources, rights, skills, etc.) "what could we make use of?"
- deficiencies, restrictions, weaknesses and shortcomings (e.g. with respect to access to resources) "what makes it difficult for us?"
- what could the group contribute to or withhold from the project?

4. IMPLICATIONS FOR POTENTIAL PROJECTS WHAT WiLL WE DO ABOUT IT?

- how should the group be judged?
- which actions should be taken (with respect to a specific group)?
- how should the project act / react towards the groups (should it act / react at all)?

2.3. Utility and limits of the instrument

Social and institutional aspects, which may be underestimated in a subject matter specialists' analysis, are given their due importance in the Participants' Analysis. The value of this instrument is that it forces planners to look at the issue under analysis with respect to, its problem-aspects a~' well as its potential and target-aspects, and all this from the different points of views of different participants.

The Participants' Analysis can also be used on its own: the choice

- of envisaged beneficiaries, and

- of the conducive set (right mix) of agencies for the execution and institutional integration of a project

can effectively be supported by a specialised Participants' Analysis with the respective questions in the centre.

The instrument will only be of limited value if, as already mentioned, speculations are used instead of empirically founded data.

Important remark

A Participants' Analysis is not a substitute for the analyses of target groups, envisaged beneficiaries and affected groups or of implementing / co-operating agencies. Instead, it is either a procedure to identify those actors that need to be analyzed more in detail or a concise way of presenting the results of such analyses.

Matrix for Participants' Analysis (Example)

Group or cluster of Participants	What, who, how are they?	Problems/Needs as they would see of themselves	Expectations / Interests from their points of view	What makes it difficult for us to work with them	What could we make use of?	What are we going to do about it?

2.4 Various Procedures

The Participants' Analysis may take different forms:

# group-by-group-analysis:	the most comprehensive form is to proceed group by group and provide all information available in a systematic way, for the selection of strategic groups; for the inter linkages of groups, and for consequences of the analysis for the project design;
# tabular representation:	see the example given in this paper.
# matrix of interrelationships:	this matrix concentrates on one aspect of a Participants' Analysis. The groups are listed in the top horizontal row and the first vertical columns of the matrix; their relationships to each other can then be indicated in the blank squares of the matrix with symbols or short sentences
# map of interrelationships:	similar to the matrix, but stress is put on the vectors rather than the cells of the matrix. The groups are arranged systematically on a big chart; their relationships to each other are indicated with various arrows (for co-operation, competition, dependency, etc.), additional explanations are written in boxes next to the corresponding arrows; this map is particularly useful when the arrows indicate concrete data such as the flow of information, a decision-making structure, lines through which orders are handed down, etc.; the map is intended to provide information on relationships which are important and critical for the success of the project. (See also Venn-Diagramme)

2.5 Linkages to other instruments

The definition of problems is dependent on the points of view of persons, groups, and institutions related to the situation under analysis. Their objectives, interests, and potentials can give hints about the potential objectives of a project and the choice of alternative strategies.

Therefore there is especially a link between Participants' Analysis and problem analysis which is expressed in the following rule:
each problem mentioned for a strategic group in the Participants' Analysis has to reappear in the problem analysis - no omissions allowed!

This will ensure the orientation of the future project towards envisaged beneficiaries and service organizations.

The link to other ZOPP-instruments can not be formulated as strictly as in the above case:

- 'expectations */* interests' may be scrutinised as a source of ideas for the analysis of potential project objectives
- for the choice of alternative strategies one should look into the potentials and deficiencies mentioned in the Participants' Analysis and take criteria and arguments from there
- the "what we can make use of information will give hints on possible contributions and actual involvement of certain actors in the potential project
- the overview of strategic groups will provide valuable insights into an appropriate structure of communication and information flow to be established
-for the determination of activities as well as of assumptions of the project the conclusions drawn in the Participants' Analysis specific to each group analysed can be a guideline
- for the discussion of external factors to be observed, the conclusions will also be a source of useful hints
- for the determination of indicators the Participants' Analysis serves as guideline for specifications on "who" is meant.

Thus the Participants' Analysis will be a source of reference throughout the further planning steps.

Therefore in most cases it is advisable to continue a planning event with the Participants' Analysis right after the context analysis and let the other steps follow. Also for group dynamics the start-up of a planning process with a methodologically easy instrument may be helpful. But this is not a must. The Participants' Analysis can also be employed at later stages in the form of a check on results obtained with other planning tools, which then may be adapted accordingly.

Apart from the ZOPP-tools the Participants' Analysis can be used to generate hypotheses for rapid appraisals; it may also be of help when identifying participants to be invited for a planning workshop.

3.0 Objectives-I Aspirations- Analysis

3.1 Definition

An objectives'-analysis in a wide sense is a procedure for systematically identifying, categorizing, specifying and - if required - balancing out objectives of all parties involved in a specific situation (for which those objectives apply). Therefore objectives may be on different levels, like development goals, political guidelines, etc.

3.2 Steps in an objectives '-analysis

a) Empirical inventory of interests, motives and objectives of all parties concerned (e.g. development goals, sectoral guidelines, objectives of relevant institutions and agencies *I* organisations, objectives of different groups of people involved or concerned)

b) Logical analysis of objectives with respect to positive overlapping and/or contradictions / conflicting objectives

c) Clarification of priority objectives to be applied in case of conflicting objectives

d) Specification of the broad objectives identified in the process.

3.3 Expected outcome of the objectives-analysis

A set of objectives for the issue under analysis, which represents the position of all relevant parties, and which is accepted by the responsible decision-makers and also is consistent in itself

Note: The objectives-analysis and the problems-analysis influence each other: the more information one has about the problem situation, the more specifically one can formulate objectives; the kind and outline of the objectives analyzed influence the perception of problems

4.0 Problems'- Analysis

4.1 What it is about

4.1.1 Overview

In a problems-analysis one identifies deficiencies and their causes by

- precisely describing deficiencies as deviations between a desired end (a normative objective) and an existing/actual situation so that the symptoms become clear
  - Deficiencies-Description
- identifying the major causes of the deficient situation as constraints in order to be able to devise ways of dealing with the root causes (rather than attempting to cure symptoms)

  - Contraints'-Analysis

Such Problems' Analysis is always related to using available potentials with respect to resources, activities and outputs

  - Potentials'-Analysis

Definition: A problem is the description of an existing negative condition in the lives of people, and not the absence of a pre-conceived solution

Example: wrong: .~ right:
no pesticides available harvest reduced by pests

The **guiding principle in the** Problems'-Analysis is:

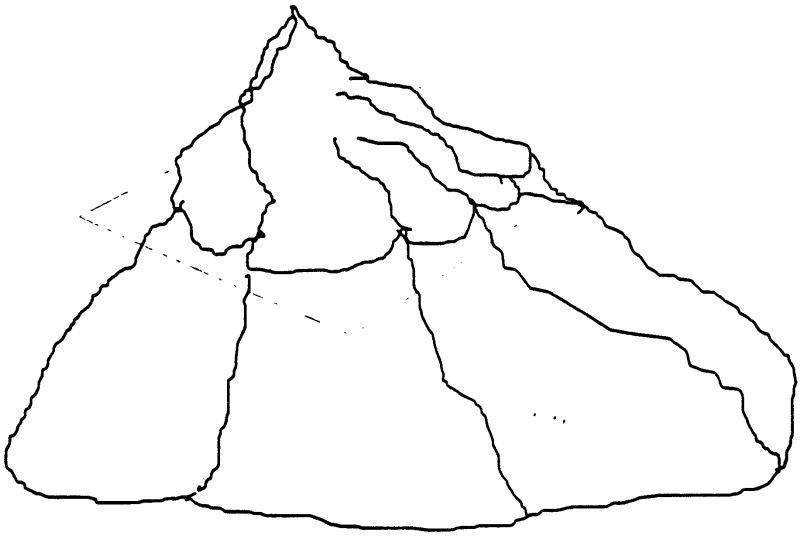
problem-focused analysis combined with a systems' understanding

Problem-focused analysis means:	analyze only those issues which are identified to be problematic, be guided by problem view - narrowing the focus with respect to the scope of analysis and at the same time digging deep into these problems and their causing factors.
System's understanding means:	understand how the system (in which the problem and its causing factors occur) operates - widening the view with respect to analyzing the interlinkages and feed-back mechanisms between components of the system

4.1.2 The perspective

In the participants' analysis, where one looks at our issue from different perspective (like someone in a boat, sailing round an island and looking at it from various cardinal points), This is different from the approach in problem analysis where one takes a helicopter view and looks at an issue from a systematic perspective. (To use the island example, one could say the island: the island above the water **(=** deficiencies] will have a submarine foundation [constraints] which is much broader and larger than the visible top.)

'The birds' eye view"



One may look at the 'problems' with a bird's eye: all different 'deficiencies 'above sea-level' will have a foundation 'below sea-level', which we have named 'constraints,' if one remembers an iceberg: nearly 90% of it is below water!

4.1.3. Definitions

In order to clarify the notions untilized, we would like to give some definitions and explications on problem, deficiencies, constraints and potentials:

Problems: In everyday language: Negative conditions which exist instead of desired and realistically achievable positive conditions. Problems cannot be perceived if there is not at the same time a feeling or an idea that a possibility for improvement exists. 'Problem, therefore, means a deviation between a targeted and an actual situation.

For purpose of planning: Problems are split into deficiencies and constraints

Deficiencies: 'Problems' related to people's lives and the various conditions for their living - past as well as present and future ones - which are unsatisfactory, difficult, insecure, unclear, not easily improvable. This understanding sets aside the old rule that problems can only be present ones: the systems' thinking will need (and allows for) taking repercussions/linkages into .account; the difficulty of different time-levels can be solved by explicitly formulating the time-relation in (each/relevant) statements. 1' lost important are the future implications!

A deficiency refers to a state of being, a quality of life which is not satisfactory to a set of people because it falls short of their desires/expectations (i.e. satisfaction of subsistence needs such as nutrition, housing, health, life-expectancy, income, leisure time, etc., including environmental damage experienced). It could also be in respect of insufficient protection, case, solidarity or autonomy, identity, control of their present/future fate.

Constraints: Factors which cause deficiencies. They may be related to people's resources, to their actions, to the results of their actions (e.g. "low production" is a

constraint, which may lead to the deficiency of “low standards of living”). In the end, it is these factors that hinder people from achieving their objectives.

Methodological remark: Deficiencies provide the entry into the analysis of respective constraints. Not every constraint in the context of an issue must be taken into the analysis, but only those which cause a specific deficiency identified as the start of the analysis. This principle we call: **problem focused approach.**

Potentials: Any resource or opportunity which is not but may be utilized in order to achieve objectives

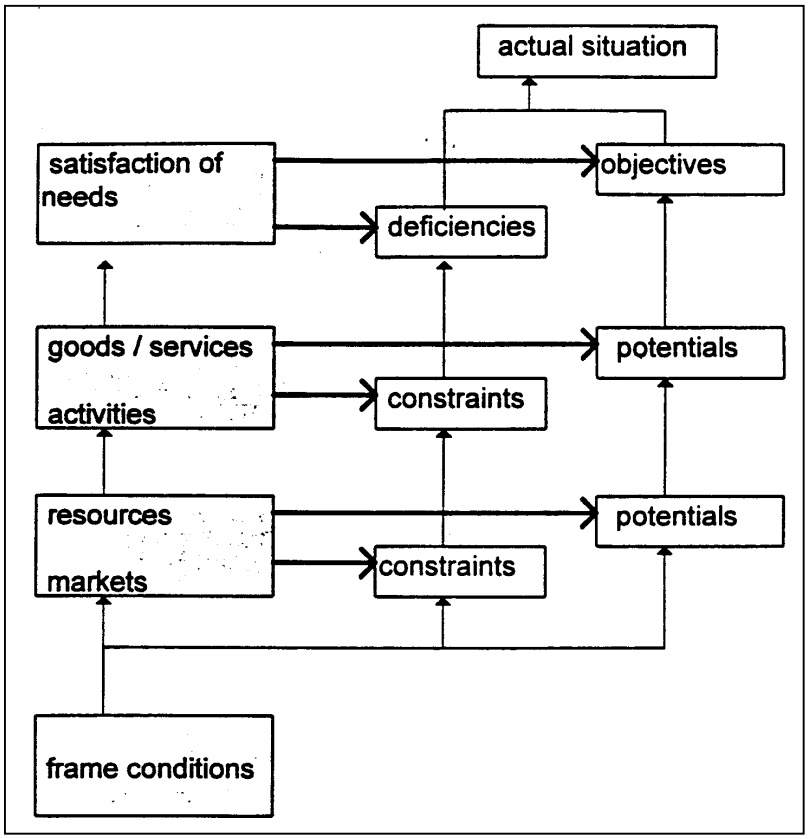
4.2 The Meta-Methodolgy: A problem-focused approach complemented by a systems’-model as underlying methodological paradigm

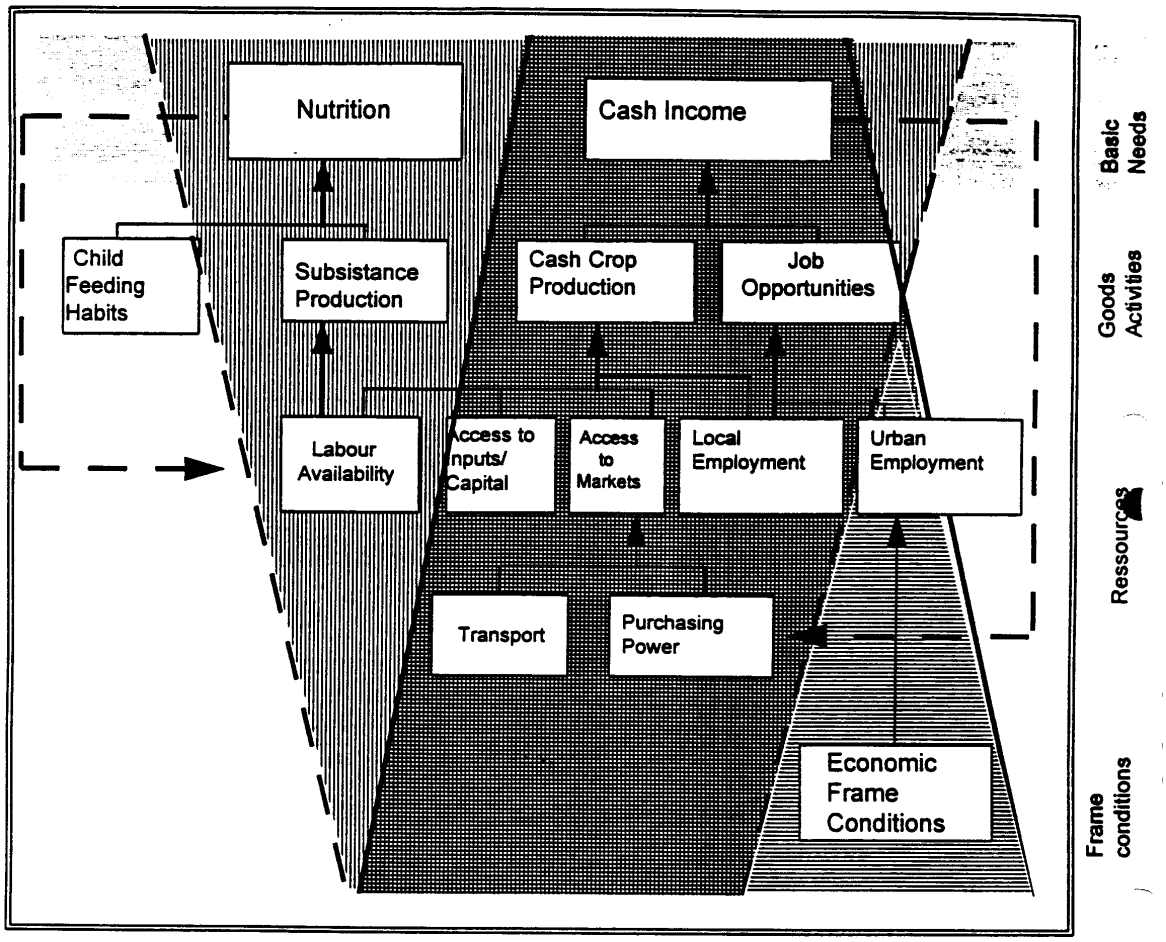
Problem focus means: concentrate only on those constraints which specifically explain why a deficiency exists (ie. the deficiency which is identified as the starting point of analysis.)
Example: if malnutrition is a deficiency, different constraints come into focus than if low cash income is the ‘starter problem’
As a complementary step, for widening the analysis, use the systems approach:

The approach to a problem-focused situation analysis is based on a simple systems-model which helps to chart the interrelation among

- frame conditions,
- resources / market-potentials,
- activities for coming up with
- outputs in order to satisfy
- needs.

Example:
If "malnutrition of children” is identified as a deficiency, and not causes of this undesirable condition of life are found to be: ’seasonal food shortages’ (which itself may be caused by ‘low level of production’ and ‘adverse terms of trade for agriculture), and ‘men receive food first’, then it is worthwhile to identify constraints outside the immediate problem-focus (e.g. ‘men are in charge of cash economy) which constitute the general system within which malnutrition must be put. By so doing, a miopic and narrow analysis can be avoided: even if production could be raised and more money would be in people’s hands, it not necessarily improve the nutrition of children, if men do not spend increased income on food


actual situation
satisfaction of needs
objectives
deficiencies
goods / services
activities
potentials
constraints
resources
markets
potentials
constraints
frame conditions



Legend:

cause(s) - effect(s) relationship

feedback mechanism

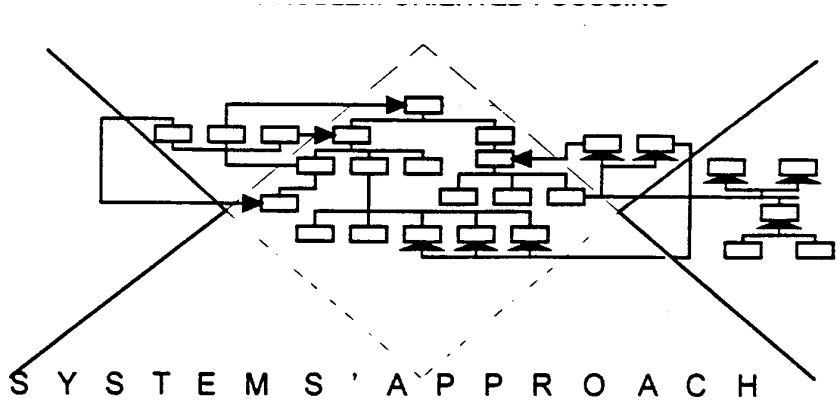
system's approach

problem focus

overlap of problem focus and system's approach

This is the underlying paradigm of the meta-methodology and will require adaptation and specifications according to the subject matter of the problem analysis.

PROBLEM-ORIENTED FOCUSING



Hint for structuring an analysis:

(1) Identify a jey (or major) problem, or a limited number of them as the starter problems first on the level of deficiencies

(2) Use the levels of the systems' model in order to identify causes to the deficiency
(3) Relate causes of effects

4.3 Deficiencies -Description

4.3.1 Definition
Analysis of the degree of satisfaction of needs with respect to the level of living conditions or the degree of goal achievement of an individual, group or organization

4.3.2 Steps of a Deficiencies'-Description:
a) Identify 'starter problems' by comparing objectives with actual situation and expressing the key-deficiencies
b) Group or cluster these deficiencies
c) Describe the deficiencies as precisely as necessary by
- kind of deviation: "what exactly is the issue and what are the deficiencies?"
- location of occurrence: "where does the deficiency occur?",
- time, dates, periods of occurrence: when does it occur?",
- quantities: "what is the extent of the deficiency?"

Sources of information on deficiencies: observations, publications, statistics,

monitoring data, interviews with people concerned, etc.

d) Countercheck the identified deficiencies by describing similar or related issues which are not deficient: “which similar issues could be expected to be deficient too but are not?”, “which similar deficiencies could have occurred but have not?”, “where can similar deficiencies be expected too but are not there?”, “when can similar deficiencies be expected but do not appear?”, “to which extent can similar deficiencies be expected but are not there?”

Note: the step d) ‘countercheck’ extends beyond a precise description of the deficiency by pointing to facts and circumstances of similar issues which are not seen as problematic; this trick will make it possible test explanations of causes to identified deficiencies in the coming steps of constraints’- and potentials’-analysis (“why is a certain cause resulting in a problem in one case but not in another?’).

- **Expected outcome of a Deficiencies’-Description**
  problems of all parties involved in the situation are listed, are specifically described and put into context

a basis for delineatnig overall objectives of interventions is established

4.4 Constraints'- and Potentials'-Analysis

4.4.1 Definition and Methodology

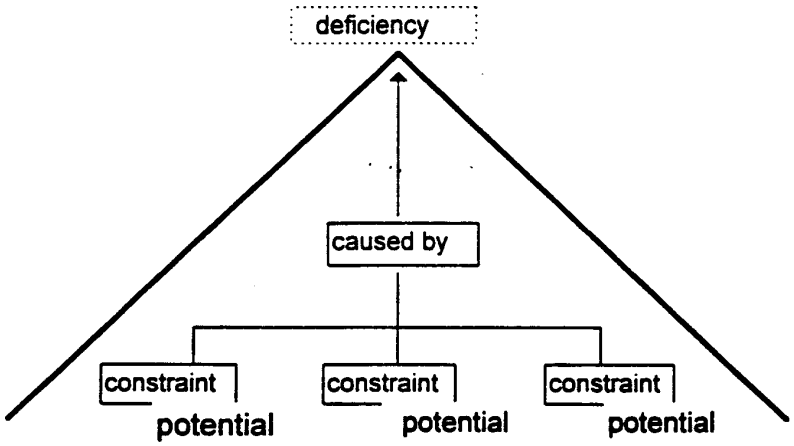
The Constraints'- and Potentials'-Analysis

- establishes the causes of the previously identified deficiencies and identifies the unutilized potentials which can contribute towards the attainment of identified objectives.

*Not the deficiencies but their **causes** will be the target of a search for **solutions** in order to approach problems at their roots.*

- is focussed by the described deficiencies.

Problem-oriented focusing:



- Constraints (as well as Potentials) are specified according to the systems'
model.

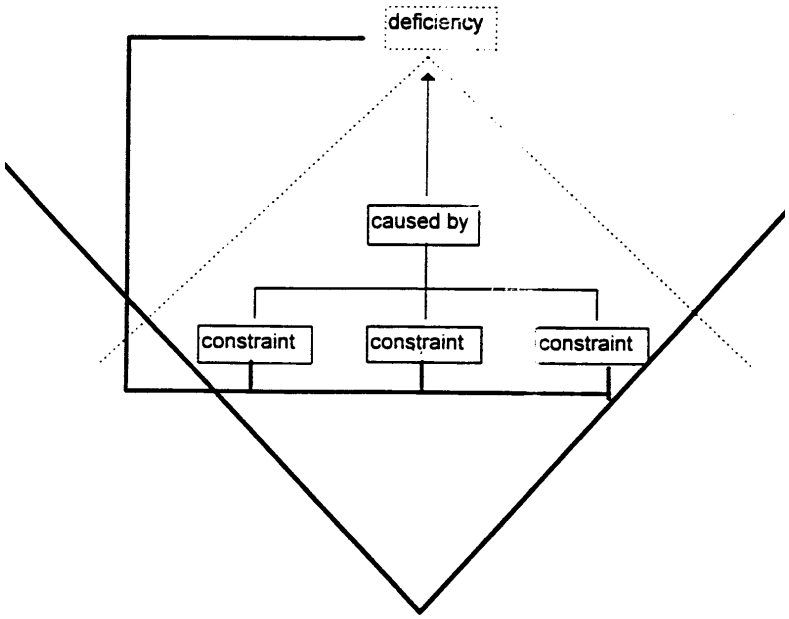
Constraints result from (and respective potentials refer to):

(a) carrying out **activities** for production of **goods and services** or for reproduction
(e.g. organization, information, distribution of responsibilities and labour, etc. for kinds of products, consumption patterns, etc.)

(b) the availability of **resources** for carrying out activities (e.g. land, labour force, know-how, capital, means of production, markets etc.)

(c) others (e.g. institutional: limited access to land, requirements for obtaining loans).

Systems' analysis:



The analysis of constraints and potentials follows the principle of the

- Pareto optimum'.

The principle says that the first 80% of to be solved a task demand as much efforts as the last 20% do. The input-output-efficiency of a total 100% task-fulfillment is questioned by this principle: It is more efficient to analyze two problem-areas at 80% each rather than analyzing only one at 100%. The Pareto-principle suggests not to stick to perfectionism in dealing with one problem alone but to optimize on analyzing the most relevant ones with the efforts available.

4.4.2 Steps in a Constraints'- and Potentials'-Analysis

In carrying out either the constraints - or Potentials Analysis, the following steps are necessary for each aspect of the analysis:

- Identifying constraints and potentials
- Structuring constraints and potentials
- Validating constraints and potentials.

a) Analysis of activities directed towards the satisfaction of needs / fulfillment of tasks with respect to constraints which cause the deficiencies and with respect to potentials which may help to solve them

Example: where a deficiency was identified with nutrition, corresponding activities gain attention (e.g increase in vegetable production, chicken raising), whereas if insufficient cash income is the

deficiency, other activities will be analyzed (e.g. increase in cocoa production for export, cattle raising)

b) Analysis of available resources - and if market oriented activities are concerned - of sales markets with respect to constraints determining activities and with respect to potentials which may help to solve problems. Structuring of resource-constraints and -potentials can generally go along categories of natural resources, labour force, capital (finance, means of production) and infrastructure. Distinguish qualitative from quantitative aspects. The analysis of resources will be strongly influenced by objectives and deficiencies.

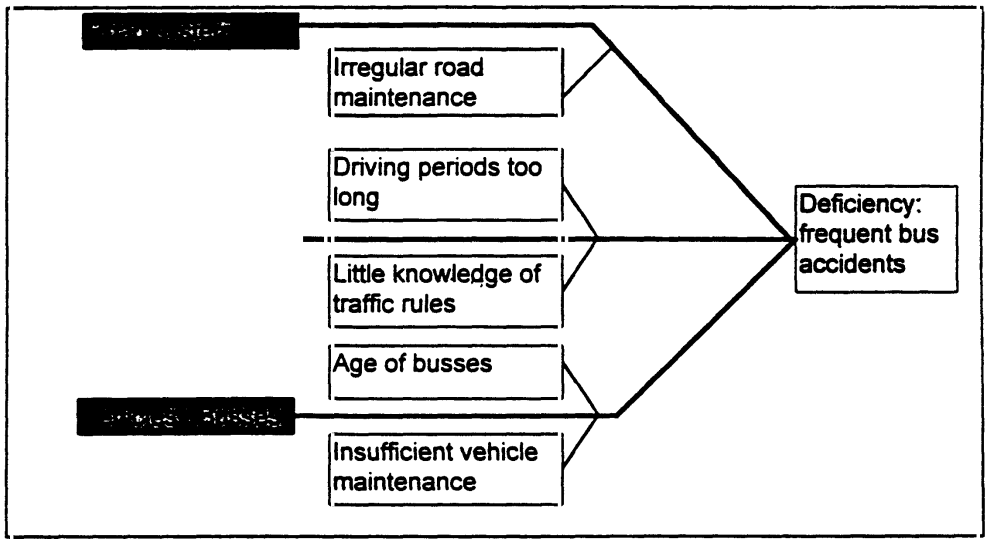
Example: analysis of potentials according to comparative locational advantages in an economic setting with export earnings as major objective, and analysis of potentials for satisfying local demand in socio-economic setting that is geared towards the satisfaction of basic needs first.

4.4.3 Alternative Methods of Structuring causes

Depending on the complexity of the deficiencies identified and the comprehensiveness of the analysis required there are several options for structuring:

a) the Ishikawa-diagram or a respective tabular representation
b) a vector diagram of influences among clusters of constraints
c) a cause-effect tree.

a) Ishikawa-diagram:

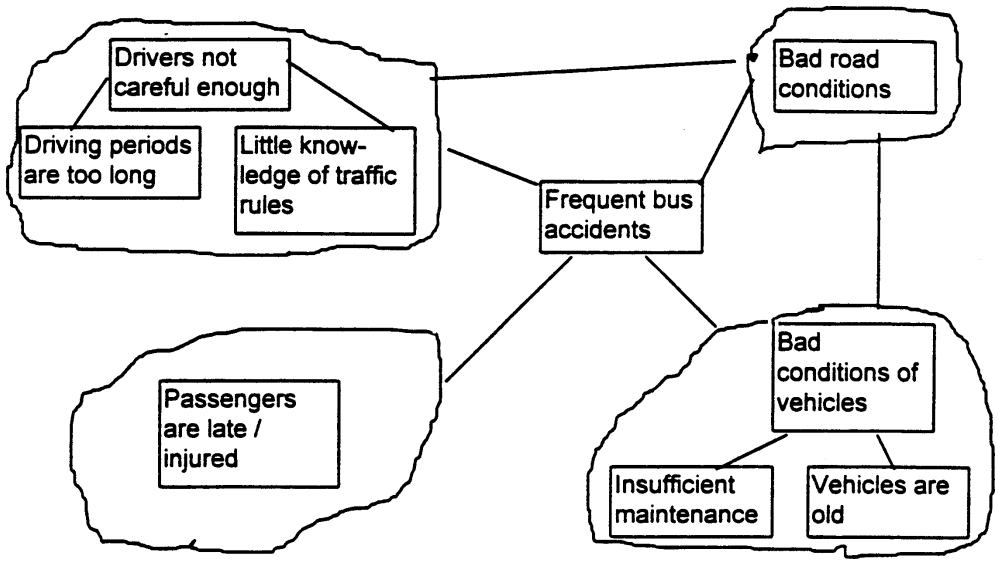


The Ishikawa-diagram is best suited to determine factors and constraints by deficiencies, without clustering the causes themselves (the same cause may appear several times if it influences several deficiencies) The following questions may be answered:

- which factors (=constraints) have an influence on a single deficiency or a cluster of deficiencies?
- which constraints determine a deficiency *I* a cluster of deficiencies?

- which causes do the various constraints have?

b) Vector diaaram:

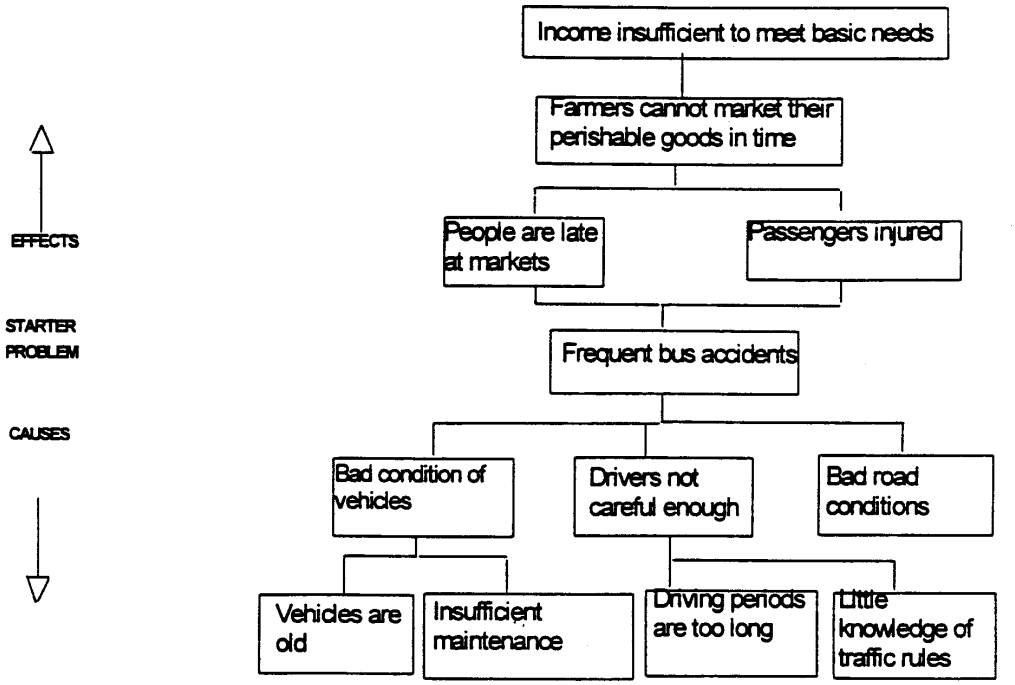


A vector diagram concentrates on clusters of causes and their interlinkages, without specifying the relative influence of the single causes of a deficiency or a group of deficiencies. The following questions may be asked:

- which constraints can be clustered together?
- which cluster of constraints is caused by or affected by which other(s)?
- why is the pattern of vectors existing?

c) Cause-effect tree

Example: Public passenger transport in a rural district



A cause-effect tree is the most comprehensive and systematic way of analyzing deficiencies and their constraints as it demands interlinking all deficiencies with all relevant types of constraints.

Note: the importance of a constraint has nothing to do with its position within the cause-effect tree

Reminder: A help for structuring the causes can be derived from the systems' model:

- high levels: constraints related to results and activities
- middle levels: constraints related to resources / market conditions
- lowest levels: constraints related to frame conditions.

4.4.4 Systematically connecting constraints to potentials

Example for a potentials-constraints matrix:

Constraints→ Potentials↓	Poor state of physical infrastructure	Inadequate access to credit	Unaffordable means of production	Lack of/ poor quality of information	labour bottlenecks during peak seasons
surplus production					
ample labour force					
natural resources					
existing factory					
imported materials					

- Categories within the potentials-column and the constraints-row vary according to the issue of analysis
- The boxes have to be filled with specific information which specify how those potentials can be used to deal with the constraints.

The more precise the formulation of the potentials and constraints (e.g. quantity, extent, time dimension, etc), the easier it will be to express how far they could be used as potentials to resolve specific aspects of a constraint.

4.4.5 Expected outcome of a Constraints'- and Potentials'-Analysis

- the most important constraints to any of the deficiencies may be identified in specific ways and understood in their systems' context

- the most important potentials for solving problems are identified and are systematically linked to constraints

- a basis for establishing and assessing alternative intervention would be established

5 Analysis of Alternatives

5.1 What is it?

5.1.1 Definition

An analysis of alternatives is a *systematic way* of *searching for* and *deciding on* ways of problem *solutions.* It follows a problem analysis and it is a prerequisite to designing action strategies.

Choices among different solutions to problems may concern
- overall concepts, strategic plans, objectives
- people, target groups, organizations, agencies
- methods, procedures, processes
- technologies, services, products, outputs
- measures, actions, materials, inputs

All alternative problem solutions considered must have a common characteristic: they must contribute to solving a problem, or in other words: they must be suitable steps towards the attainment of identified guiding objectives (=relevance).

⇨ Alternatives can only be analyzed as different means (the **"how": doing the thing right) to reach a pre-defined end (the "what": doing the right thing)**
Analyzing alternatives thus is not a once for all exercise, but it is

⇨ **a continuous task in project management.**

5.1.2 Basic Procedures

An alternatives' analysis generally devolves in two steps:

1) ***Search for alternative solutions*** →"which choices do we have?"

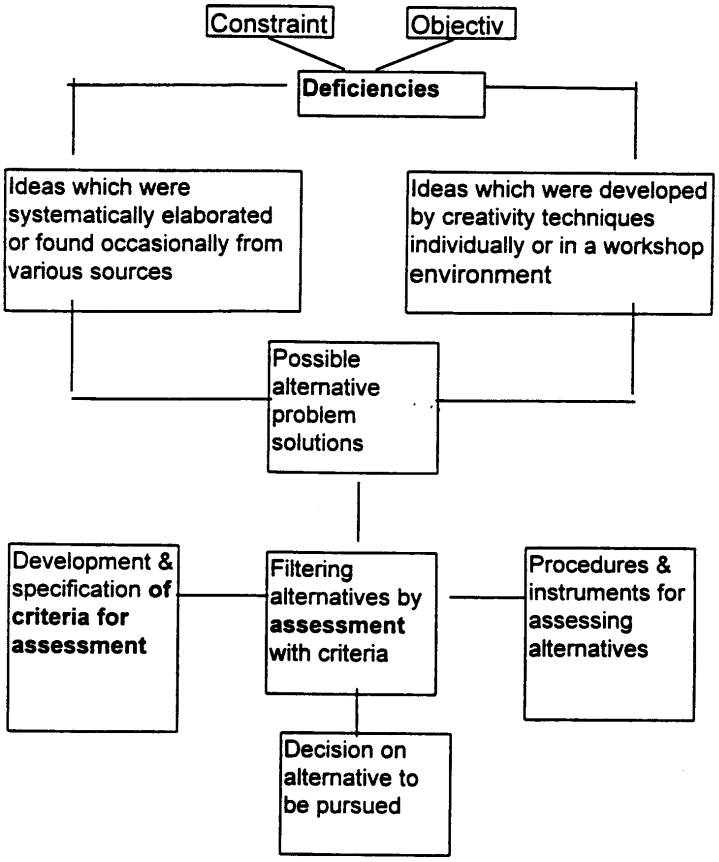
At the end of this first step we expect to have identified or listed and characterized different means by which a defined status / objective could possibly be reached or by which a deficiency could be resolved.

2) ***Decision(s) on an alternative to be pursued*** → "which choice do we make?"

At the end of this second step we expect to have assessed the possible alternatives by applying relevant and specific criteria.

Choices eventually selected are the better,
- the clearer the understanding of the respective situation is,
- the better discernible visions on different problem solutions are, and
- the more transparent the selection of choices can be made.

Ways of finding ideas on problem solutions



5.2 Search for Alternative Solutions

There are several possibilities to look for alternative solutions out of these we would like to present you two different ones:

- Ideas, which were developed by creativity techniques and
- Ideas which were systematically elaborated

5.2.1. Development of Alternative Solutions by Creativity

The procedure is as follows:

a) Collect ideas as creatively as possible without at first validating them (brainstorming).

Usual, professionally sound, logically derived as well as unusual, fantastic, even out-of-bounds ideas are all welcome

They are listed without (prematurely) assessing their feasibility or desirability. Ideas collected may

* exclude each other, or
* complement each other.

b). Cluster and concretise ideas.

Concretising means: detail various components of an idea and detail actions or preconditions with respect to the implementation of every idea (but: do not mix up components with preconditions!).

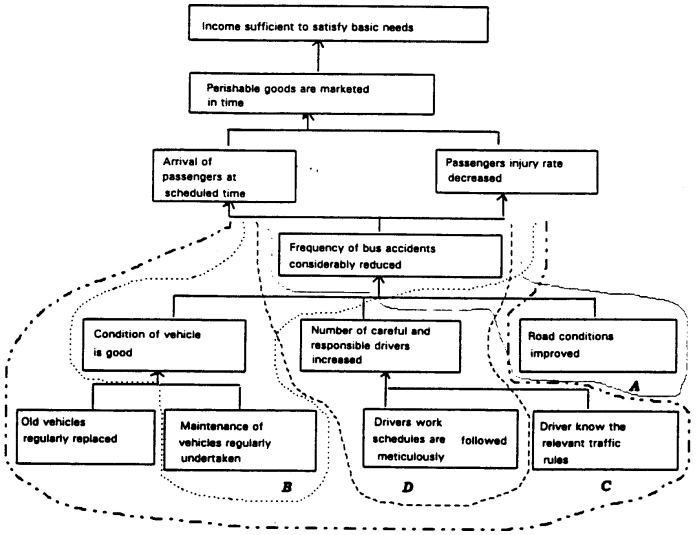
The sources of ideas on alternative solutions may be publications, books, newspapers, correspondence or own experiences, experiences gained elsewhere or/and by others and general goals, guidelines

- inverted (positively formulated) problem statements.

5.2.2 Development of Alternative Solutions by Systematic Elaboration

A systematic way is f.i. to invert the problem statements. By positively formulating the problems tree you will arrive at an objectives tree which indicates desireable situations. Out of these you may develop alternatives, as shown in the example.

A road rehabilitation
B workshop
C driving school
D organisation development



5.3 Decision on alternatives

5.3.1 Basics

The **objective** of the decision-making process is to come up with solutions or actions
which are
- desirable —-"what do we / do they / does **... *want**?",*
and
- realistically achievable —*"what ***can*** we / they / ***achieve*** or **do**?".

The following chapters show three options for alternative analysis which differ from each other by the level of complexity.

5.3.2 Assessment (first option): Advantages versus disadvantages

The simplest and often sufficient technique is a 'pro-s' and 'con-s' listing for the alternatives under scrutiny. The points in favour of an alternative (advantages **=** pro-s) and the points which speak against an alternative (disadvantages **=** con-s) are stated as specifically as necessary with respect to the end, to which the alternatives are different means.

Alternative	A	B	C	D
'pro-s'				
'con-s'				
Conclusion				

In more complex situations, however, such simple ways of assessment may not be

satisfactory as the criteria on "what is considered advantages and disadvantages"
need to be made explicit.

5.3.3 Assessment (second option): Development and specification of criteria

-Independent of the chosen process the assessment of alternatives requires assessment criteria which are able to cover all alternatives under scrutiny. Criteria for assessing alternatives are *an integral part of the decision-making process.*
Such criteria at least have to be *put into the open* and preferably should be *jointly agreed upon* in order to increase the acceptance of the choices made.

- Criteria are always linked to the issue under consideration. General criteria for development projects usually will be derived from two sources:

* (development) political guidelines, which themselves are subject to changes, and
* feasibility considerations related to the project outfit and frame

conditions.

The following list reflects present **development policy guidelines:**

* alleviation or reduction of poverty (whereby 'poverty' has a wide spectrum of definitions)
* direct or indirect benefits of the project to ultimate beneficiaries like income or employment effects, improvements in the standards of living, etc.
* relevance of the project measures and the induced changes by various target groups, notably women ('socio-cultural and gender compatibility')
* participatory procedures for enhancing democracy and pluralism
* ecological impact and sustainability of saving scarce resources for coming generations
* absorbtive capacities and capacity building of the political-institutional system on the level of self-help-groups as well as on the level of implementing agencies ('ownership', human resource development, capacity development)
* replicability of propagated project solutions in similar problem scenarios/mass impact of interventions
* sustainability of the project's effects after its closing down
* etc.

Feasibility criteria for projects may comprise of:

* time horizon foreseen for the project's life cycle
* resources allocated and in actual fact available to the project like budget, expertise in relation to quantities / qualities / periods of expected outputs
* probability of achieving objectives considering the conduciveness/difficulties in frame conditions (effectiveness)
* expectations, wishes and respective support or resistance of influential groups concerning the project or components of it
* sensitity with respect to risks
* cost-benefit considerations (efficiency), etc..

- Hardly ever will all criteria be of equal importance for assessing different alternatives. It may be helpful to distinguish between:

* ***Obligatory criteria*** ('must'-criteria) which are indispensable (laws, norms, limitations of any kind, human standards, given guidelines) and must be realistic

* ***Desirable criteria*** ('should'-criteria) which reflect political and individual priorities, sectoral objectives, professional standards and considerations, etc. These latter criteria may be weighed (by percentage figures or marks) in order to put the basis of assessment into the open.

- General criteria are only useful for determining the general approach of a development project, i.e. for deciding on its high ranking objectives (goal, purpose). Criteria will have to be **specified** if used for assessing

lower ranking objectives or measures to be carried out.

Examples
* participation of target groups' may be specified by:
# abilities to contribute to envisaged activities in the context of required support
# organisational burden involved in envisaged activities
# participation of special disadvantaged groups, e.g. women
# already existing organizational arrangements of target groups
# etc.

* the suitability of different alternative implementing agencies for delivering services to beneficiaries may be assessed by specified criteria like:
# legitimacy of agency in the eyes of the target groups
# actual outreach to beneficiaries
# compliance of the agency with the approach envisaged by the project
# capacities of the agency like number of staff and available means
# reliability and sustenance of the agency
# etc.

5.3.4 Assessment (third option): Procedures and instruments for assessing alternatives with specified criteria

- A commonly used instrument is the assessment matrix. It matches different alternatives to be assessed with specified criteria by which the assessment can be made.

- For each statement respective information is needed, which will often entail professional knowledge (e.g. for economic feasibility assessments) as well as the contributions of parties or persons concerned with the issue (e.g. beneficiaries to assess the acceptability of a measure).

Alternative→	A	B	C	D
Criteria↓				
1				
2				
3				
4				
5				

Assessment matrices should be filled with specific information concerning each alternative and each criteria.

Example: Road rehabilitation (I)
Alternatives: A/ Labour intensive gravel roads
BI Machinery intensive tarmac roads

General criteria: participation of beneficiaries specified: I maintenance

requirements
2 effects on women
3….

Example for the assessment matrix:

Alternatives → / Criteria ↓	A: labour intensive gravel roads	B: machinery intensive tarmac roads
Maintenance requirements	high demand on labour force esp. during rainy season when there is a labour bottleneck due to farming	demands 1/3 of labour compared to alternative A, but higher wages as tarmac repair is qualified labour
effects on women	+ better marketing opportunities - higher work load, hence danger of increase in malnutrition of children	+ better marketing opportunities + less increase in work load - less income
…	…	…

A variation to using specific information in the respective boxes is the assessment by scoring, known as 'utility analysis'. It has the disadvantage of not being transparent because the scores given are subjective; there is even a danger that the exact figures suggest untrue objectivity; but it has the advantage to allow for weighing the 'should-criteria' used.

Format for a utility analysis (example):

Alternatives → Criteria ↓	Scores 1-10	A scores	weighted	B scores	weighted	C scores	weighted
must-criteria							
1		yes		no		yes	
2		yes		yes		yes	
3		yes		yes		yes	
should-criteria	weight 5 (examples)						
4	*5%*	*5*	*25*	*3*	*15*	*7*	*35*
5	*35%*	*8*	280	*5*	*175*	*4*	*140*
6	*20%*	*6*	*120*	*3*	*60*	*9*	*180*
7	*10%*	*2*	*20*	*4*	*40*	*2*	*20*
8	*30%*	*3*	*90*	*10*	*300*	*3*	*90*
Sum	*100%*		*535*		*590*		*465*

Procedure for an utility analysis:

Step 1: Decide on a certain *number of possible alternatives* (e.g. “A”, “B”, “C”) and describe them

Step 2: Determine the *relevant criteria* for evaluating the alternatives (see e.g.above under 3)

Step 3: *Weigh* the should-criteria in percentages, which add up to 100 %

Step 4: Establish a *table* of alternatives (e.g. “A”, “B”, “C”, etc. as headline) and weighed criteria (e.g. ‘Target group acceptability”, “Political priority”, “Budgetary implication” etc. in columns)

Step 5: Rate must-criteria "yes" or “no”; give *scores* between 1 and 10 to each alternative for each should-criteria (e.g. “A” **-** Target group acceptability” “8”, etc.)

Step 6: *Multiply* weights (percentages) by scores

Step 7: *Add-up* multiplied scores for each alternative

Step 8: Compare summed-up scores and evaluate the result, e.g. by setting extra standards (e.g. “if not within political priority, the respective alternative is down-scored by half’, etc.).

This procedure can also be *simplified,* in case where e.g. there is not sufficient information available for weighing the selection criteria. There are the following way is simplifying:

***** Between 0 and 3 positive (+, **++,** +++*)* or 3 negative scores **(- , – , –)** are attached to each alternative per criteria.
***** Each alternative is evaluated in terms of up to 3 plus-signs or up to 3 minus-signs per criteria.
***** The plus and minus signs are added up, the alternatives thus are scored and can be compared. Extra standards can be applied as above.

Example of an alternatives selection by utility analysis
Step 1: “A” road rehabilitation project
“B” = bus maintenance and repair facility project
“C” = training and driving skills enhancement project
“D” **=** organisational development project

			Step 3:
Step 2:	1.	Solution easy	20%
	2.	Sustainability of effects	25%
	3.	Impact on envisaged beneficiaries	25%
	4.	Spread effect / replicability	30%
		sum	100%

Step 4-7

		A		B		C		D	
1	20	9	180	8	160	9	180	3	60
2	25	3	75	7	175	2	50	4	100
3	25	8	200	2	50	5	125	2	50
4	30	1	30	7	210	8	240	2	60
			385		595		605		270

Step 8:
Workshop and driving school have priority and are close to each other.

*Special remark: road rehabilitation has to be exchanged due to limitation of funds available

Other techniques like decision-making trees (for a sequence of problem-solutions where a previous decision influences the next one), or the critical path analysis (identifying risky elements, their causes and possible reactions to them in order to improve flexibility of reactions in implementation) have not yet proven to be practical in the field of designing development project interventions but are rather useful in decisions with reduced options, e.g. in technical design.

5.4 Decision-taking

Taking a decision on the assessed alternatives requires

- utmost transparency, which is linked to a clear and agreed upon process of analysis and assessment, and

- the legitimacy of the decision-takers, which concerns the participation and the rights of different participants in the decision (e.g. a veto-right for **. . .) .**

Who is	-	Entitled	Who	May
	-	Capable		Should
	-	affected		Has to take part in the decision

6 Project Planning Matrix (PPM) -Overview (in brief)

6.1 What is a PPM?

The PPM provides a **one-page summary**:

Why a project is carried out
(= who/what will benefit?)

What the project is expected to achieve
(**=** utilization of services)

How the project is going to achieve its outputs/results
(= measures executed)

Which external factors are crucial for the success of the project
(= risks and frame conditions)

How we can assess the success
(= indicators)

Where we will find the data required to assess the success
(= means of verification).

6.3 What does a PPM look like?

PROJECT PLANNING MATRIX

	Intervention Strategy	Objectively Verifiable Indicators	Means of Verification	Important Assumptions/ Risks
Development Hypothesis	**DEVELOPMENT GOAL**			
	PROJECT PURPOSE			
Manageable Interests	**OUTPUTS/ RESULTS**			
	ACTIVITIES	Specification of inputs I costs		

6.4 How are the fields of the matrix interlinked?

a. strategic objectives in the intervention strategy and important assumptions.

Vertical Logic

Intervention Strategy		Important Assumptions
DEVELOPMENT GOAL		Assumptions **for** sustaining the goal in the long term.
PROJECT PURPOSE	*achieved plus*	Assumptions **for** achieving the goal
OUTPUT/RESULTS	*achieved plus*	Assumptions **for** achieving the project purpose
ACTIVITIES	*carried out plus*	Assumptions **for** achieving the results

b. Intervention Strategy and indicators / means of verification
Horizontal Logic

Descriptive Summary	**Indicators**	**Means of Verification**
DEVEL. GOAL ⟹	Specifying goal ⟹	For respective indicators
PURPOSE ⟹	Specifying purpose ⟹	For respective indicators
OUTPUT/RESULTS ⟹	Specifying results ⟹	For respective indicators
ACTIVITIES ⟹	No indicators but input/ costs	

6.5 PPM - General Format

PROJECT:	PROJECT PLANNING MATRIX (PPM)	**Country:** Project No Time Frame of PPM:	**PPM prepared on (date):** Remark
Intervention strategy	**Objectively Verifiable indicators**	**Means/sources of verification**	**Important Assumptions**
Overall Goal, general strategic orientation of the project	***For the achievement of the overall goal***	***For respective indicator***	***For sustaining the achievement of the overall goal in the long term***
Development Goal to which the Project Contributes	***For the achievement of the development goal***	***For respective indicator***	***For sustaining the achievement of the development goal in the long term***
Project Purpose	***For the achievement of the project purpose***	***For respective indicator***	***For achieving the overall goal***
Outputs/Results	***For achievements of the outputs/results***	***For respective indicator***	***For achieving the project purpose***
Activities	***Specification of inputs / costs of activity each***		***For achieving the outputs/result***

7 The Intervention Strategy (= The Descriptive Summary of the PPM)

7.1 Introduction

7.1.1 Definitions

OVERALL GOAL Overall strategic orientation of a project by national or sectoral priorities set in government plans and policy statements by the partners *(policies)*
'What are common orientations of the development cooperation?"

DEVELOPMENT GOAL improvements strived for by the target groups
(changes),,What do <u>they</u> (the beneficiaries) want to change?"

PROJECT PURPOSE New conditions/ qualities or capacities achieved when target groups adopt / utilize the project / program output(s) ***(utilization) ,,What do <u>they</u> (the beneficiaries) do differently utilizing the project's outputs and services?"***

OUTPUTS/RESULTS Goods, services and facilities provided by the project / program ***(deliverables),,What do <u>we</u> (the project) provide?"***

ACTIVITIES Measures / tasks carried out by the project / program in order to achieve and obtain the outputs/results *(actions),,What do **<u>we</u>** (the project) do?"*

<u>7.1.2 Clarification on the different elements in the prolect strategy</u>

In the past years of ZOPP there have been two levels of objectives, the development goal and the project purpose. According to recent discussions and efforts to make the instrument more flexible, additionally two new levels of goals have been introduced:

- one goal, which expresses the orientation of the development policy on a national, sectoral or regional level. The co-operation between partners is considered as stable, when goals in this level correspond with each other.

- one goal, which describes the improvements of the situation strived for by the target groups.

According to the specific planning situation, the levels of objectives/goals necessary to describe the intervention strategy has to be discussed and decided upon.

Projects may only be successful when they are accepted by the target groups and partner organisations. There also has to be an active engagement for development strived for. The planning process, therefore, is always "bottom-up", starting with the needs and objectives declared by the target groups. Nevertheless, important parts of the objectives are determined before the planning starts. the development goals and overall goals are fixed by

national guidelines. This atop-down" element in the planning process, provides the frame conditions, in which projects may be conceptualised.

Below follow definitions and more detailed descriptions of the different parts of the project strategy:

OVERALL GOAL	The goal describes the **strategic orientation** of the development cooperation	In a policy dialogue, the partner governments agree to the common orientation of their development cooperation. A project may be linked to several Overall Goals. They do not only provide criteria for the selection of projects for cooperation but also provide guidelines for the conceptualisation of the single projects.

DEVELOPMENT GOAL	The goal describes the **improvement** of the situation which the target groups are striving at.	The development goal draws the attention to all actors, who participate in the project, to the development process of the target groups. In development cooperation impacts shall be achieved especially on this level. Projects take place, to support processes of change. The ones concerned are certain people and organisations. But they are not passively accepting the project services, but actors. They want and have to decide which in direction they want to develop. The function of the development goal is, to give the process of change a common perspective.

PROJECT PURPOSE	The purpose describes the changes in behaviour of the envisaged beneficiaries or related structures which are brought about by the **utilisation of** whatever the project has to offer (i.e. outputs and related activities).	The practical relevance of this specification may be even more important than the one for the goal: * This strategy element constitutes the 'customer orientation' (or apply the more common term in development: the 'target group orientation') of a project; it forces the planners to explicitly state who and how the offer of the project will be used. * Obviously, the resulting change of behaviour will be beyond the direct control of the project management. * The planned offer (i.e. outputs and activities) will have to be adjusted so that the envisaged beneflciairies will make use of the project's outputs, facilities and services. * Utilizing the project's offer is necessary in order to accrue benefits from the project; thus this definition is the logically required link between 'outputs' and 'goal'.

OUTPUTS/ RESULTS	The outputs or results describe the **facilities, services and goods** provided by the project. For planners they are the **'deliverables'** of a project.	Outputs are what the project is offering from its own side. The y should not be mixed up with 'desired future situations' . Those effects would be taken care of by the purpose- and goal-level.

ACTIVITIES	Activities describe what the project staff eventually does in terms of **deliberate efforts measures** in order to achieve the outputs.	Activities refer to taks/actions to be carried out by utilising project resources (human, financial, equipment, etc.) The detailed plan showing who performs which task, using what resource constitutes a "Plan of operations" which is discussed in Volume 4 (Implementation) of this series of manuals on Project Management.

7.2. How to elaborate a strategy for development interventions?

7.2.1 General Procedure

The planning follows the objectives-orientation: higher ranking objectives guide the delineation of lower ranking, more specific objectives;

- *in the PPM: proceed top down from the impact* **(=** *'goal' and 'purpose') to 'outputs' to 'activities'*

- *avoid an "activist" orientation* **=** *starting with "what do we do" ('activities') and finding justifications ('goals') for this*

- *avoid the trap of a gap between 'activities' to 'goal/purpose' in leaving out the 'outputs' which an intervention is to deliver.*

In order to delineate objectives, problem statements may to be turned into positive statements which could constitute potential objectives.

Potential objectives in practice are found through the situation analysis and an alternatives' analysis.

In the decision on alternatives, meaningful and feasible objectives are defined from a certain perspective.

The definition of objectives in a project or program will have to consider all important perspectives in their complexity.

The process of coming up with this center piece of planning, the intervention strategy, can only be clarified with respect to its underlying rationale, not in terms of procedural prescriptions

7.2.2 Strategy objectives in general

The delineation of strategy objectives is a procedure in designing a project *I* program which entails

- describing the overall future situation which would be desirable and realistically achievable if problems were solved;

- enabling planners to identity alternatives with respect to guiding project *I* program objectives

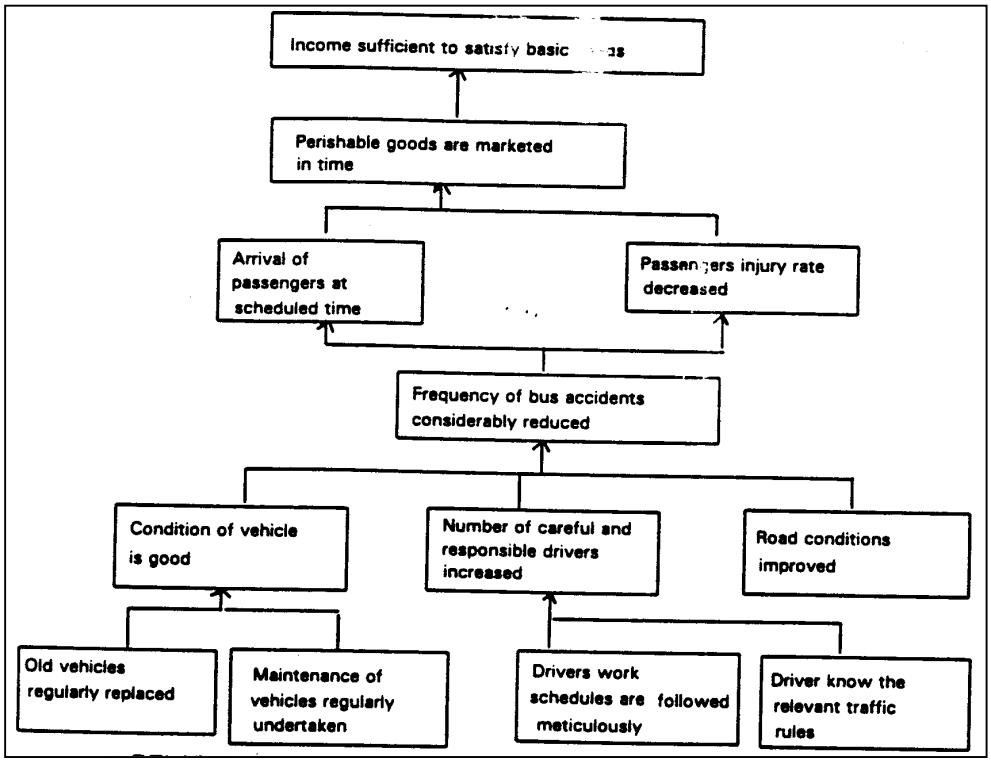
- establishing a development goal and a project *I* program purpose as a frame of reference for the further elaboration of the alternative means for achieving those guiding objectives in the strategy design

- analyzing the relationships between mean and ends

7.2.3 Derive potential strategy objectives from problem statements

All *negative conditions* of the problem statements on the level of deficiencies are transformed into **positive conditions** and described as already established facts (positive statements as final end for planners' orientation)

Example: (inverted Problem Tree =) Tree of Potential Objectives



= RELATIONSHIPS BETWEEN MEANS AND ENDS

The statements should describe:

conditions which are
> desirable ("what do we want to achieve?") and
> realistically achievable ("what can we achieve?").

Hint: not all problems necessarily have to be overcome, there are ***alternative ways of dealing with problems***

overcoming problems,
e.g. 'bad soil quality' ⇨ fertilizer
poor access to markets ⇨ transport

adjusting to problems
e.g. 'bad soil quality' ⇨ plants which grow on poor soils production for local demand

'poor access to markets⇨ production for local demand

reducing objectives
e.g. 'bad soil quality
+poor access to markets ⇨ no income increase possible, or: out migration of people supported

Objectives may need to be **deleted** which do *not* appear to be *necessary.*

7.2.4 Conceptualizing the intervention strategy

To conceptualize the strategy of a program ***/*** project so that it may yield substantial and sustainable impacts has to take into consideration all of the following professional development concerns:
A project */* program must

(a) be adjusted to the economic frame conditions under which it operates with its limited scope of intervention, and must ensure the economic viability of efforts stimulated for all parties involved against its economic means (e.g. subsidies) to spark off intended improvements

(b) be adjusted to ecological conditions even within marginal natural resource endowments and geared towards restoring a balanced natural environment so that also future generations can also live with the changes induced

(c) adjust its measures to different groups of intended beneficiaries so that the majority of them can make use of the support given by implementing agencies **-** which again will demand corresponding adjustments by the implementing agencies **-** on the basis of a sound knowledge of the **target groups**

(d) devise ways and means to ensure **participation** especially of disadvantaged groups in situations where their adequate articulation is not institutionalized **-** with regard to the elaboration of all the above strategy elements as well as with regard to the continued legitimacy of the decision-making process without the project's intervention

(e) **+** (f) be adjusted to the institutional-political frame conditions under which beneficiaries(self-help ***organisations)*** as well as ***implementing support agencies*** will incorporate the induced changes and be able to sustain them even after the termination of the project will be terminated

(g) have a clear understanding of its own role as complementing the efforts of other 'role-players' or 'actors' as well as the function of **external assistance** if any is needed or

provided.

In order to meet these conditions in a professional way, of analyses and strategic components developed during the development design (conceptualisation) process should be eventually put together to make up the intervention strategy.

7.2.5 Steps in formulating a strategy

Step 1: Establish the project purpose(s). The project purpose is the envisaged solution which describes the desired changes in the behavior and capacities of the beneficiaries, resulting from their utilisation of will have utilized the project's outputs, services and facilities.

Step 2: Establish the goal as the overall beneficial achievement to which the project makes a considerable contribution

Step 3: Elaborate the results / outputs in terms of the services and facilities the project will have to provide (what is to be delivered?)

Step 4: Derive activities as measures to be executed by the project in order to achieve the results / outputs (how is it to be achieved?)

7.2.6 Example of Intervention Strategy

PROJECT **RURAL BUS SYSTEM**	**PROJECT PLANNING MATRIX (PPM)**	Country: **Zoppesia** Project No: 123XYZ Time Frame of PPM: **from month of … 199y to month of ….199z**	PPM prepared on (date): **today** Remark: **Demonstration example**
Intervention Strategy	**Objectively Verifiable Indicators**	**Means/Sources of Verification**	**Important Assumptions**
Development Goal to which the Project contributes **Peasants of village A. B. C. increase their income through market production**	*For the achievement of the development goal*		*For sustaining the achievement of the development goal in the long term*
Project Purpose **Peasants arrive at the market place safely and on time**	*For the achievement of the purpose*		*For achieving the development goal*
Outputs/Results **1. Buses are regularly maintained and repaired** **2. Standard training courses for bus drivers implemented** **3. Management system for optimal deployment of drivers and flexible bus use established**	*For the achievements of the results*		*For achieving the project purpose*
Activities (example) **2.1 check knowledge and deficits** **2.2 design appropriate course curriculum** **2.3 carry out courses for…** **2.4 evaluate impact of course and revise curriculum**	*Specification of inputs/costs of each activity*		*For achieving the outputs/results*

7.3 Examples of Strategic objectives formulated in an Intervention Strategy

7.3.1 Examples of Development Goal and Project / Program Purpose

a) DEVELOPMENT GOAL

The **development goal** describes the development, which the respective target groups strive for themselves.

It contains hints on: the kind of support which my help the target groups and by what type of capabilities they should be enabled to keep up or improve their conditions in changing economic, social and institutional environments

Example for a goal statement of a rural development program	*Example for a goal statement of a project (within a program):*
"The majority of the farming population, especially of marginal farmers, have a substantially improved income and nutritional status and are in a position to improve their material living conditions on a lasting basis through a flexible adjustment to market and political conditions"	*same as for program (as it describes the benefit to the ultimate beneficiaries)*

b) PROJECT PURPOSE

The **purpose** of a program or a project describes the *changes* in behaviour, structures or capacity of the target groups. The services of the project are to be directed towards the achievement of the change.

It contains aspects like: a changed type *I* method of resources utilitsation, an improved system of production *I* organisation which allows the target groups to participate in the project *I* program, and which is adjusted to their economic, social, ecological and institutional frame conditions

Example for a purpose statement of a development program in agriculture	*Examples for a purpose statement of a project (within a program)*
"The majority of small-scale farmers (esp. female farmers) apply improved intercropping systems, are using contract ploughing services, and take their surplus production to near-by markets with local means of transport; the improved cropping systems work with reduced fertilizer application and self-produced seeds"	*- The majority of male and female small scale farmers applies improved intercropping systems with reduced fertilizer application and self-produced seeds"* *- Farmers take surplus production to the market with local transport* *- The majority of small-scale farmers (especially the females) is using contract ploughing services* *- The farming population is able to solve problems arising on its own.*

(Note: The purpose of a project shows the immediate outcome of the utilization of support measures provided by the program (which is composed by different sectors) by different target groups. To try to express all this as one purpose would mean using abstract and unspecific terms. It is therefore and because more specific to define different purposes for different target groups. Each sectoral implementation agency may have a PPM of its own. The project supports the sectoral implementation by (non-sector specific) planning support consultation services, etc. The utillsation of these contributions of the project to the sectors is organised sectorally.)

c) OUTPUTS / RESULTS

The **outputs** or **results** describe the goods and services, the direct deliverables which are contributed from the side of a project or program.

Outputs or results must express the nature, scope and intensity of support or of the solution being sought. This includes

- provision of information on support / solution,
- compatibility of support / solution with prevailing frame conditions,
- access to support / solution by specific target-groups, including gender-aspects,
- availability of support / solution,
- capacity building of agency / agencies which provide support / solution.

Example for output / result -statements of a development program in agriculture

- *Seasonal small-scale loans available on a group basis for the majority of the farming community*

- *A scaled-down draught oxen package on credit to use for contract ploughing is made available to men and women elected by farming groups*

- *80 % of the farming population have a seasonal marketing opportunity within a 10 km radius*

- *Motorized transport of products is made available at cost-covering freight rates whenever at least 10 tonnes of grain can be provided at one location on the main road*

- *Selected farmers (male/female) schooled as ox-trainers, and encouraged to provide their serices against a fee in the villages•*

- *Group advisory services are provided to farmers (maleflemale) and rural women with the cost of providing the advice gradually declining as a proportion of output value*

- *Loans and guarantees are provided to private-sector wholesalers who begin stocking inorganic fertilizers*

- *Sufficient number of ox-carts to transport fertilizer is made available to every village*

- *Farmers (male/female) are trained to produce and store good quality seed.*

- *Savings are encouraged, and seasonal borrowing is reduced to zero.*

Example for a purpose statement of a project (within a progra)m:

- *Group seasonal loan scheme identified and tested for which all female and male farmers are eligible, which assures a high repayment ratio and which does not entail undue administrative cost for the lending organisation*

- *Draught oxen system identified and tested which benefits the majority of farmers while limiting the additional acreage required by the oxen owners*

- *Cultivation system identified and tested which allows a drastic reduction on the proportion of external inputs and takes account of produce marketing capacity*

- *Economic input supply system identified and tested*

- *System for achieving a long-term improvement in the cost-benefit ratio of agricultural extension services identified and tested*

- *Marketing co-operative provided with institutionalized access to the foreign exchange required in order to re-equip vehicle fleet.*

- *Agreement initiated with private-sector wholesalers*

- *Plan elaborated for an ox-cart program to serve the entire region*

- *Means for farmers to produce and store their own seed put to the test*

- *Savings project tested*

Note: Program and project outputs / results do not match one by one but can be related to each other.

7.4. Checklist for assessing the strategy in the PPM (ZOPP-logic only, no developmental assessment)

Development goal level

* Does the development goal sufficiently specify the benefit of the project for the target groups?

Project purpose level

* Is there only one project purpose? (unless explicit arguments are given for providing more than one)
* Does the project purpose detail the change in capacities, practices and behaviour by the target groups as result of the utilization of the project results by the same target groups?
* Is the purpose not a summary of the outputs/results?
* Does the project purpose go beyond the competence of the project management to act?

Result / output level

* Are the results / outputs clearly formulated as having already been achieved?
* Are each of the outputs/results necessary for achieving the purpose?
* Are the outputs/results in their totality sufficient for achieving the purpose?
* Is it realistic to assume that the project management can be held responsible for achieving the outputs/results?

Activities level

* Are each of the activities necessary for achieving the respective outputs/result?
* Are the activities in their totality sufficient for achieving the respective outputs/result?

Vertical integration

* Are the hypothetical relations linking
  # activities and outputs/results,
  # outputs/results and purpose
  # purpose and development goal plausible and complete?

8. Assumptions / Risks

8.1. What it is about

8.1.1 Definition

Assumptions are major *conditions* (frame conditions) which are *outside the direct control of the project,* but which are *so important* that they will *have to be met or have to hold true if* the project is to achieve its objectives.

The **aim** of specifying assumptions is:

- to *assess the potential risks* to the project concept right from the initial stages of project planning
- to support the *monitoring of risks* during the implementation of the project (assumptions can be specified by indicators and are an object of monitoring the frame conditions of a project / program and the changes in the frame conditions)
- to provide a firm basis for necessary *adjustments* within the project whenever it should be required.

8.1.2 Why 'assumptions'?

Risks may occur in the project itself or in the project environment. As a project is a limited effort for enhancing improvements in a given situation, it is to a high degree dependent on external factors. The project is only one of the actors on this stage of change, and plays a minor (still crucial) role. External risks may endanger the project, but cannot be influenced by the project management. For any project to succeed, a professional attempt to clarify important external factors is required. It is not necessary to comprehensively cover all eventualities / contingencies.

An internal risk can be that partners do not agree to the same orientation of development and pursue different directions. An other example is, the partner does not furnish the agreed conterpart contributions. These aspects are quite important to the success of the project and have to be reflected and acted upon

8.1.3 Distinction between Preconditions and Frame-conditions (Assumptions)

Preconditions which ought to be satisfied while designing and/or well as implementing a project must be distinguished from risks during implementation.

The required **preconditions** for starting up a project (e.g. the necessary budget and / or personnel) or for its implementation with co-operating partners (e.g. partner agencies having taken the obligation of financial or other contributions) often pose a threat to a project. Unless those preconditions are realised a project cannot be started or must not be continued. It is not acceptable to mingle such preconditions up with risks for attaining results.

Example: "Counterpart contributions are at the project's disposal in time" is as little acceptable as assumption as "Foreign consultants are dedicated and qualified to fulfil their duties".)

Frame conditions on the other hand, are situations which are either conducive to the achievement of the project's objectives, or **-** and this is mostly the case **-** which are adverse, and the project has to find its own ways of dealing with them adequately. If solutions regarding how to go about with difficult frame conditions cannot be found it is not acceptable

to put them as assumptions into the 4th column of the PPM.

Assumptions are **external factors** to a project if they are neither preconditions nor under the direct control of the management, but if they are important with respect to achieving the objectives outlined for a project. The vertical logic requires (only) that:

- all activities related to one output plus the assumptions for the respective output ensure the achievement of the output
- all outputs (being already achieved) plus the assumptions for the purpose ensure the achievement of the purpose
- purpose being attained plus assumptions for the development goal ensure the achievement of the development goal.

8.1.4 Importance and likelihood of occurrence

An assumption describes a factor which:

- is *external to the project* (i.e. outside the direct control of the project)
- is *relevant to the implementation/success of the project*
- *and the realisation of which must be probable*

An assumption is important when there is evidence that the failure of a such condition to hold true may jeopardise the project's success.
If assumptions are likely to hold true, then the project's success is assured. An assumption with an uncertain degree of probability needs to be monitored because it may seriously endanger the project if finally it does not hold true.

If important assumptions are very unlikely to hold true, they are referred to as "killer-assumptions".

The project must then be redesigned to remove the "killers"

8.2 Example of Assumptions

PROJECT **RURAL BUS SYSTEM**	**PROJECT PLANNING MATRIX (PPM)**	Country: **Zoppesia** Project No: 123XYZ Time Frame of PPM: **from month of … 199y to month of ….199z**	PPM prepared on (date): **today** Remark: **Demonstration example**
Descriptive Summary	**Objectively Verifiable Indicators**	**Means/Sources of Verification**	**Important Assumptions**
Development Goal to which the Project contributes Peasants of village A. B. C. increase their income through market production	*For the achievement of the development goal*		*For sustaining the achievement of the development goal in the long term*
Project Purpose Peasants arrive at the market place safely and on time	*For the achievement of the purpose*		*For achieving the development goal* **Competing producers do not receive excessive subsidies by other intervening agents**
Outputs/Results 1) Buses are regularly maintained and repaired 2) Standard training courses for bus drivers implemented 3) Management system for optimal deployment of drivers and flexible bus use established	*For the achievements of the results*		*For achieving the project purpose* **Trained bus drivers apply their new knowledge** **Road Improvement measures are implemented (possibly by a project of another donor)** **Ticket prices are in line with the purchasing power of the farmers**
Activities (example) 2.1 check knowledge and deficits of …. 2.2 design appropriate course curriculum for…. 2.3 carry out courses for… 2.4 evaluate impact of course and revise curriculum 2.5 …	*Specification of inputs/costs of each activity*		*For achieving the outputs/results* **1 ….** **2. Drivers attend courses regularly and are sufficiently motivated** **3. ….**

8.3 How to identify and formulate Assumptions

8.31 Sources for generating assumptions

There are four important sources of finding assumptions within the ZOPP procedure:

a. The analysis of potential strategy objectives

The objectives which are not included in the project strategy (i.e. outside the direct control of the project) but are systematically required to be attained in order to reach the next higher level of objectives constitute a source of ideas for looking for assumptions. Again the rule as already explained for the transformation of objectives to the project strategy applies: objectives may be combined or divided in order to show factors which are important and external.

- *Any objective in the tree of potential objectives which has not been selected for inclusion into the project design* may be examined to determine whether it can amount to an assumption.

b. The Participants' Analysis (column: constraints)

In case, constraints of participants are not classified as preconditions to a project, they may also be a source for assumptions if they are not tackled directly by the project but overcoming them is important for the achievement of the project's objectives. Constraints, which are tackled by either the intended beneficiaries or by other service institutions are possible candidates for assumptions.

- *Assumptions can also be identified from the Participants' Analysis (especially in the "constraints" column of that analysis)*

c. A special analysis of undesired negative side effects of the project interventions

Most of the important assumptions will only show up through problems accruing during project implementation. During planning, an explicit analysis of undesired negative side effects on all levels of the descriptive summary has proven to be highly enlightening. Compare a procedure which follows the same rationale: Situation Analysis", Description of Deficiencies).

d. Rational, logic argumentation

Another important way to come up with assumptions is by dealing with the question: "which other external factors must become true to achieve the next higher level of the objectives hierarchy in the PPM, assuming that all objectives on the level under consideration are already achieved?" This question will also ensure that the assumptions are placed on the right level in the PPM.

I

8.3.2 Typology of frame conditions

Frame conditions which may reflect the reality of developing countries (in each case with differing intensity and differing variations), and which cannot easily be influenced by actors on the project- /program-levels, are:

F I Macro-economic frame conditions

F 1.1 Limited sales markets for increased production
F 1.2 Limited competitiveness of local (esp. small scale) production
F 1.3 Instability of prices, exchange rates, interests rates
F 1.4 Foreign exchange bottlenecks, high level of foreign debt

F 2 Institutional-political frame conditions

F 2.1 Leadership oriented towards 'Western' patterns of production and consumption
F 2.2 Little legitimised participation of the disadvantaged majority (economically marginalized, clientelism, diversity of activities)
F 2.3 Subnational governments ***I.*** leaders interested in selective promotion-measures
F 2.4 State administration / bureaucracy is paternalistic and oriented towards plan implementation / deployment of approved budgets
F 2.5 Limited flexibility of state administration as regular service institution
F 2.6 Crisis of government finance: limited potentials for expanding capacity of government agencies
F 2.7 Donor countries have interests in foreign affairs, global strategies and political-economic stability
F 2.8 Donor agencies interested in deployment of approved budgets and securing their position on a permanent basis

F 3 Ecological frame conditions

F 3.1 Limited or even diminishing potential in useable natural resources (land, water etc.)
F 3.2 Environmental degradation and pollution

F 4 Socio-cultural Frame conditions

F 4.1 Endogenous capabilities to solve problems are existing (though often not sufficient) but not taken into consideration
F 4.2 Within their incentive systems people act rationally
F 4.3 Security ranks very high in people's decisions
F 4.4 Care of social and clientelistic relationships has high importance
F 4.5 The "we"-identity of ethnic, religious and area-related groups has limited effects on production and consumption decisions
F 4.6 Reciprocity
F 4.7 Family ties
F 4.8 Strong regionalism

Knowledge about these types of frame-conditions should help in the identification and analysis of assumptions

8.3.3 'Levels of assumptions in the PPM

- In order to make the assumptions logical, the following methodological approach is recommended:

  * If all activities pertaining to one output/result have been carried out, what other factors are necessary in order to achieve that output/result;
  * if all outputs/results necessary for achieving the purpose have been reached what other factors needed in order to accomplish the project purpose(s)
  * if the purpose(s) has (have) been achieved, what else is necessary in order to attain the overall goal

Assumptions must be formulated as *positively established conditions* in order to make the logic of the PPM complete and sound.

Note concerning a "sustainability assumption":

The wide-spread habit of putting a so called "sustainability assumption" on the goal level is in danger of being an excuse for lack of professionalism. If sustainability is not built into the design of all the project strategy, it will not be achieved by formulating an assumption for it. Sustainability, being one of the basic pillars of any project intervention, must be the proper occupation of all responsible persons connected with a project.

8.3.4 Two more rules for identifying assumptions

a. Concentration on important assumptions only

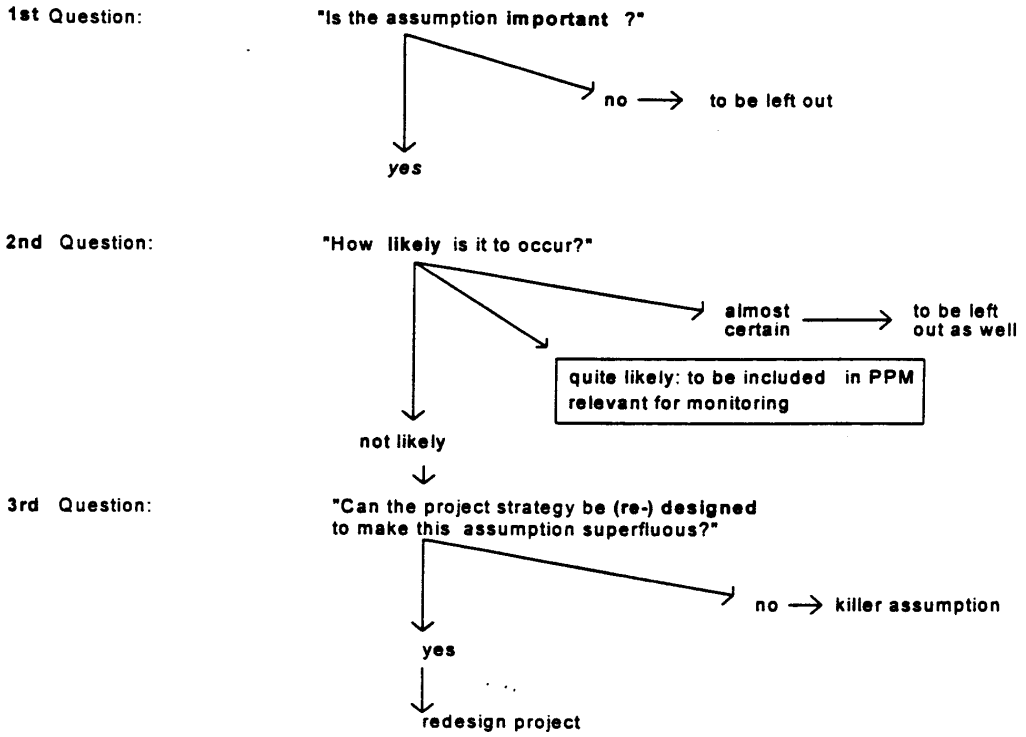
   Assumptions must be an aid for the project management during actual decisions on implementation. In order not to overburden the management with observing too many factors, therefore, it is crucial to concentrate on important assumptions only and to leave out those which do not present any significant risk to the project.

b. The rule of minimising risks:

   Risks for project implementation are to be minimised. A large number of assumptions reflects a high risk for the project. Important assumptions vary in the degree to which they are likely to occur and also to the extent that projects can be re-designed/adjusted to take care of them. Those assumptions which have a high possibility of occurring and against which project adjustments are very unlikely are called Killer assumptions: these present high risk factors to the project, and must be avoided. The 'killer assumptions', which prompt the rule to a change in project design or even lead to stop the project, are only the extreme cases of this continuum. Stress must be put on avoiding risks.

Assumptions have to be *assessed* according to their importance and probability of occurrence

8.3.5 Assessment of Assumptions



8.3.6 The following checklist may be helpful for assessing assumptions;

a) Formal aspects:

- Are the assumptions formulated as positive conditions?
- Are the assumptions formulated precisely enough to allow for the elaboration of indicators and for their subsequent monitoring?
- Are assumptions about conditions that will be conducive to the achievement of outputs/results (on activities level) attributed to one specific output/result (by corresponding numbering)?

b) Checks on the vertical integration:

- Is every assumption on the correct level?

- The assumptions on every level are not preconditions for achieving what is described in the descriptive summary on the same level. Rather, what is described in the descriptive summary column is the basis for the respective assumptions;

  e.g.: if all activities required for achieving one result are supposed to have been executed, what additional external conditions have to hold true or occur in order to achieve the result? Or: if all results have been achieved, what additional external conditions have to hold or occur in order to achieve the purpose?

- Are the assumptions complete on each level? Is the realisation of the next higher level of objectives guaranteed, if the stated assumptions hold true?

c) Checks on the assessment of assumptions:

- Is the assumption really outside the project's influence(external condition) and not a service or facility which the project has to deliver?
- Is the assumption important for the project?
- How high is the probability of its occurrence?
- If it is important and attributed a high probability, can it be influenced by the project?
- Is there a hidden "killer"-assumption anywhere?

9 Indicators

9.1. Definition

An indicator is a qualified/quantified parameter which details the extent to which a project objective has been achieved within a given time frame and in a specified location.

Indicators are *performance standards* which translate the strategic objectives of the project strategy in the PPM into empirically observable, quantified and concrete, i.e. "objectively verifiable" measurements / indicators (OVI). Together with the means/sources of verification, they provide the basis for monitoring a project.

“Objectively verifiable” means that indicators are measurable not only subjectively. Therefore, when different persons, who may be involved in monitoring the progress of a project or evaluating the achievements of project objectives, use OVIs for measuring reality, they should arrive at the same conclusions.

Indicators

- must *specify* project objectives
- must focus on *important characteristics* of an objective to be achieved
- will force planners to clarify *what is meant* by the objectives
- will tell if an objective is *successfully* attained by the project
- provide a basis for *monitoring and evaluation.*

Indicators have the task to state clearly

- which *goods and services* a project plans to make available (output-level indicators),
- **how the** *target groups’ utilisation of the goods and services (outputs/results)* will affect their activities, practices and behaviour (purpose-level indicators), and
- what *benefits* the target groups are expected to obtain from utilising the project outputs (goal-level indicators).

9.2 Characteristics of a good indicator

A good indicator is:

- *substantial,* i.e. it reflects the essential content of an objective in precise terms
- *plausible,* i.e. the effects observed are resulting directly from the intervention
- *target-oriented,* i.e. it specifies what is to be expected in terms of quality, quantity, time and location, in order for the next higher objective to be achieved
- *independent,* i.e. it only applies to one single objective
- *measurable* i.e. it can be empirically assessed (by means which are economically justifiable)
- *verifiable,* i.e. it can be assessed objectively by independent evaluators

9.3 Types of indicators

a. *Input indicators* measure the resources going into activities.
b. *Output indicators* measure achievements of results.
c. *Impact indicators* are on the goal and purpose levels. They may also take into account unintended as well as side effects.
d. *Performance indicators* are ratios of inputs to outputs and hence are of a comparative nature.
e. *Structural indicators* are static and represent an “end-of-status” situation.
f. *Process indicators* are dynamic and transformation oriented and often qualitative in nature.
g. *Direct indicators* are specification oriented and those with close logical link.
h. *Indirect indicators* are “proxies” for those that cannot be specified directly.

9.4 How to formulate a good indicator

a. Using your professional know-how and creativity, make sure to identify an appropriate indicator by specifying what you mean by the individual elements (measurable parameters) within an objective
b. As a second step (and only them) qualify each indicator with respect to envisaged beneficiaries, quality, quantity, area/locality, time horizons

Note: Indicators can only be formulated or the basis of professional know-how. Consequently, quite often it does not make sense to establish their detailed formula by involving too many participants. It may be useful to have an interdisciplinary group identify those indicators that need to be further elaborated and specified.

9.5 Example of an indicator

Example of how to construct an Indicator for **Project Purpose** (although one indicator may not be sufficient)

“Peasants of village A, B, C,.. arrive at the market place safely and in time”

a. Envisaged beneficiaries: more than 50% of the female peasants who produce a marketable surplus
b. Quality: ability to transport their vegetables and children, arriving at the market in the early morning hours
c. Quantity: 80% of their marketable products
d. Area: on bus routes from villages A, B, C, **...** to the market place
e. Time-frame: 3yearsafterthebeginningoftheproject's implementation phase

The indicator would read:

3 *years after the beginning of the project's implementation phase, more than 50% of the female peasants who produce a marketable surplus are able to transport 80% of their marketable products (plus dependant children) from their villages to the market place, arriving there in the early morning hours.*

PROJECT **RURAL BUS SYSTEM**	**PROJECT PLANNING MATRIX (PPM)**	Country: **Zoppesia** Project No: 123XYZ Time Frame of PPM: **from month of … 199y to month of ….199z**	PPM prepared on (date): **today** Remark: **Demonstration example**
Descriptive Summary	**Objectively Verifiable Indicators**	**Means/Sources of Verification**	**Important Assumptions**
Development Goal to which the Project contributes Peasants of village A. B. C. increase their income through market production	*For the achievement of the development goal* **After year 3 of project implementation income from market sales of more than 70% of peasants is at least stable (or increased)**		*For sustaining the achievement of the development goal in the long term*
Project Purpose Peasants arrive at the market place safely and on time	*For the achievement of the purpose* **3 years after the beginning of the project's implementation phase, more than 50% of the female peasants who produce a marketable surplus are able to transport 80% of their marketable products (plus dependent children) from their villages to the market place arriving there early morning hours**		*For achieving the development goal* **Competing producers do not receive excessive subsidies by other intervening agents**
Outputs/Results 1) Buses are regularly maintained and repaired 2) Standard training courses for bus drivers implemented 3) Management system for optimal deployment of drivers and flexible bus use established	*For the achievements of the results* **1. After year 2 of project implementation a repair of a serious breakdown of a bus does not take longer than 10 days after the bus reaches the workshop** **2. After year 3 of project implementation accidents caused by drivers' themselves reduced to below 30% of all accidents** **3. After year 3 of project implementation the bus transport capacities are adjusted to the marketing requirements in different villages in the course of the harvesting season.**		*For achieving the project purpose* **a. Trained bus drivers apply their new knowledge** **b. Road Improvement measures are implemented (possibly by a project of another donor)** **c. Ticket prices are in line with the purchasing power of the farmers**
Activities (example) 2.1 check knowledge and deficits of …. 2.2 design appropriate course curriculum for…. 2.3 carry out courses for… 2.4 evaluate impact of course and revise curriculum 2.5 …	*Specification of inputs/costs of each activity*		*For achieving the outputs/results* 1 …. 2. Drivers attend courses regularly and are sufficiently motivated 3. ….

9.6 Dimensions of Indicators (in terms of required aspects)

	(1)	(2)	(3)	(4)	(5)
DESCRIPTIVE SUMMARY/ LEVEL OF OBJECTIVES	**Target Group**	**Quality**	**Quantity**	**Area/ Locality**	**Time**
DEVELOPMENT GOAL = Which benefits are expected from the project outputs?	WHO will use the project outputs and benefit in a way	WHAT PRECISELEY will be the benefit of using the project outputs?	HOW MANY persons, groups or organizations will benefit? or HOW MUCH will be the total benefit?	What is the smallest AREA in which the benefits will materialize?	WHEN will the benefits materialize?
The purpose as specified by the indicators must be sufficient to contribute to the achievement of the development goal					
PURPOSE=How will the target groups change their activities, practices and behaviour by utilising the project outputs/results?	WHO is expected to use the outputs?	HOW PRECISELY will the target groups use the project outputs?	HOW MANY persons, groups or organisations will use the project outputs?	WHAT is the smallest AREA in which the outputs will be used?	WHEN will the target groups use the outputs?
All outputs/results as specified by the indicators must be sufficient to facilitate the achievement of the purpose					
OUTPUTS/RESULT = Goods and services made available to its target group by the project	WHO will receive or have access to the outputs?	WHAT PRECISELY will be the goods and/or services provided to the envisaged beneficiaries?	HOW MANY of these goods and / or services will be available?	WHAT is the smallest AREA in which the goods and services will be available?	WHEN will the goods and services be available

9.7 Examples of indicators

*If a **development goal** reads*	*Then **indicators** can be:*
"Income of the majority of the male and female farming population has increased (with special consideration given to micro-enterprises and female farmers)"	- at least 50 % of the farmers (male/female) with less than 2 hectares (ha) in region X have - doubled their real net cash family incomes 5 - years after the project's start from presently x $ - the proportion of female farmers among these successfully*) participating farmers to be over - 40 % - the proportion of farmers (male/female) with less than I ha to be more than 65 % among the participating farmers
"The farming population has gained the capability to achieve a sustained improvement in their living conditions by adjusting flexibly to market conditions and by supplying local markets"	- number of income sources per producer is more than 3 - share of total income covered by the most important income source is less than 50 % share of sales made on local markets is more than 60 % *our definition of "successfully" is: ...see above double income

*If a **purpose** reads*	*then **indicators** can be:*
"Farming population is - successfully using intercropping systems with reduced inorganic) fertilizer inputs, saving contractors plough with oxen - using own seed, - taking surpluses to market non-motorised transport, - able to solve problems arising by themselves"	- average net yield per hectare / per working day at market prices are … - fertiliser inputs are halved by the end of the project - share of output value taken up by input cost (or foreign exchange cost) to fall below 20 % - 5 % of farmers own a pair of oxen - 50 % of (male/female) farmers employ contract ploughing, which adds up to 40 % of arable land actually ploughed - oxen owners use 75 % of ploughing capacity of their oxen on other people's fields - workshop repair frequency for ox-carts at most once a year - at least 3 farmers are growing seed in each village

*If an **output/result** reads*	*then the **indicators** may be:*
“Group seasonal loan scheme identified and tested for which all male and female farmers are eligible, which assures a high repayment ratio and which does not entail undue administrative cost for the lending organisation”	- test program conducted over a 3- year period with a random sample of 5 % of farmers (male/female) - key results: 80 % of groups have repayment ratio of> 95 % - administrative cost **<** 10 % of amount of loan

9.8 Checklist for assessing indicators

Quality of the indicator

* Is the indicator not a reformulation of what it is supposed to indicate?
* Does the indicator reflect an essential element of the objective?
* Is the indicator directly related to the project's efforts (and not to other framework conditions / developments / interventions)?
* Does the indicator apply to one single objective only?
* Does the sum of indicators for a complex objective sufficiently reflect all important aspects of that objective?
* Does the indicator measure the achievement of the objective (or does it merely describe what has to be done in order to achieve an objective)?
* Does the indicator specify its objective to an extent that it can help to define the achievement of the objective on the next higher level?

Specific details of the indicator

* Does the indicator specify
  # target groups
  # quantities
  # location
  # time periods
  # quality standards in sufficient detail?
* Are the measurements precise enough?
* Is the indicator objectively verifiable?
* **Can the required** data for the indicator be provided at required dates?
* Can the monitoring be carried out in such a way that it will be justified in terms of time and money?
* Can information derived through monitoring be counter checked (by reasonable means) by the project management and by evaluation missions?

Formal aspect:

* Are indicators numbered and directly related to specific objectives?

10 Means of Verification (MoV) - (in brief)

10.1 Definition

Means of verification indicate:

- How to acquire evidence that the objectives have been met
- Where to find proof which will provide the data/information required for each indicator

Indicators and MoV form the basis of the monitoring system of a project. In practice, in a ZOPP workshop MoV can only be defined provisionally. They are revised as the monitoring system is elaborated.

10.2 How to determine provisional MoVs:

Step one: - Are MoVs obtainable from already existing and accessible sources,e.g. statistics, reports, observations?

- How reliable are these sources / data?

Step two:- Is gathering of special data required?

- Provide for an activity (e.g. within 'monitoring activities')
- if so, what will it cost?
- Include in "specification of cost"

NB: If one cannot find a meaningful/cost-effective MoV, the indicator has to be changed

10.3 Example

RURAL BUS SYSTEM	**PROJECT PLANNING MATRIX (PPM)**	Country: **Zoppesia** Project No: 123XYZ Time Frame of PPM: **from month of … 199y to month of ….199z**	PPM prepared on (date): **today** Remark: **Demonstration example**
Descriptive Summary	**Objectively Verifiable Indicators**	**Means/Sources of Verification**	**Important Assumptions**
Development Goal to which the Project contributes Peasants of village A. B. C. increase their income through market production	*For the achievement of the development goal* **After year 3 of project implementation income from market sales of more than 70% of peasants is at least stable (or increased)**	Households income survey at village A, B, C, 3 years after the project's start	*For sustaining the achievement of the development goal in the long term*
Project Purpose Peasants arrive at the market place safely and on time	*For the achievement of the purpose* **3 years after the beginning of the project's implementation phase, more than 50% of the female peasants who produce a marketable surplus are able to transport 80% of their marketable products (plus dependent children) from their villages to the market place arriving there early morning hours**	Annual survey at market place 1 month after beginning of the harvest season	*For achieving the development goal* **Competing producers do not receive excessive subsidies by other intervening agents**
Outputs/Results 1) Buses are regularly maintained and repaired 2) Standard training courses for bus drivers implemented 3) Management system for optimal deployment of drivers and flexible bus use established	*For the achievements of the results* **1. After year 2 of project implementation a repair of a serious breakdown of a bus does not take longer than 10 days after the bus reaches the workshop** **2. After year 3 of project implementation accidents caused by drivers' themselves reduced to below 30% of all accidents** **3. After year 3 of project implementation the bus transport capacities are adjusted to the marketing requirements in different villages in the course of the harvesting season.**	Workshop service cards Police records of bus accedents Bus schedules	*For achieving the project purpose* **a. Trained bus drivers apply their new knowledge** **b. Road Improvement measures are implemented (possibly by a project of another donor)** **c. Ticket prices are in line with the purchasing power of the farmers**
Activities (example) 2.1 check knowledge and deficits of …. 2.2 design appropriate course curriculum for…. 2.3 carry out courses for… 2.4 evaluate impact of course and revise curriculum 2.5 …	*Specification of inputs/costs of each activity*		*For achieving the outputs/results* 1 …. 2. Drivers attend courses regularly and are sufficiently motivated 3. ….

11 The Plan of Operations

11.1 What is it all about?

a. The operational phase of a project commences **when the project team starts implementing** the activities in order to achieve the expected outputs/results. In many cases this may be one or two years after the project concept had been established at the end of the design phase [as laid down in the PPM of the project appraisal]. In the meantime framework conditions may have changed, so that a verification of the PPM must take place during the operational planning. The project purpose and development goal, however, should be altered only in exceptional cases when major changes have occurred.

b. The Plan of Operations is the detailed plan for the implementation of project. It is established by the project team and will be documented as

- workplans / work schedules
- project budget / resources plans
- personnel plans
- material and equipment plan **/** procurement plan / staff training plans.

The sum total of these plans form the Plan of Operations.

c. The Plan of Operations becomes the **central document for the implementation of the project.**
Based on the PPM

- it describes the major activities and the **sub-activities**
- fixes the **periods** in which the activities and sub-activities are to be carried out
- indicates comprehensively the resources required for activities I sub-activities.
- indicates the intermediate targets (= milestones) to be reached by the activities / sub-activities
- specifies all the important assumptions which have to be secured in order for activities of the project to be successfully implemented. The continuing validity of the assumptions should be monitored through indicators (note: project management should always be alert to identify possible alternative activities of the important assumptions do not hold true.

The intermediate targets are called **'milestones'** They define the targets which are to be reached by each activity or sub-activity As the activities or subactivities are listed in a consecutive order the completion of each activity may be seen as a ‘milestone’ on the way to achieving the relevant result.

- forms the basis for executing each individual work step
- forms the basis for timing the use of resources
- forms the basis for monitoring/controlling the project implementation which might lead to necessary re-scheduling or re-planning ("rolling planning”)

d. The **period of reference** for the plan of operations is identical with the ongoing or actual project phase (normally a period of 2 **-** 5 years). In individual cases, for example for projects with a preliminary orientation phase, the period of time should be further broken down into shorter periods (yearly, quarterly) to facilitate responsive steering of project operations. It is sometimes necessary to prepare a more detailed one-year plan of operations after the general 2-3 year plan has been outlined.

e. The accepted Plan of Operations is **binding-** for all parties collaboration in the project implementation (e.g. implementing agencies and the funding agencies). The Plan of Operations often has the legal status of an international contract, when the project has external funds, such as contributions from a donor agency. The planning team therefore works out a proposal, which requires the consent and formal agreement of all authorities involved.

f. The work plan / (or work schedule) and the project budget *I* (or resource plan) may be integrated into a combined work sheet: the **Combined Workplan and Project Budget.** This constitutes the core of the Plan of Operations.

11.2 Format and demonstration example of a Combined work plan and project budget

Project: Rural Bus System

Planning Period: 199x - 199z

Result No.: 2) Standard training courses for bus drivers executed

No. Activities	(Auxiliary indicator) Milestone	a)Assigned to b)Responsible	'9x I	'9x II	'9x III	'9x IV	'9y	'9z	Staff Requirement (PM*) CP	EXP	Loc.	Cons	Cost	Training Requirements P/M	Cost	Equipment/Materials	Cost	Building	Cost	Misc.	Cost	Maintenance & Repair	Cost	Assumptions and Remarks
2.1 check knowledge and deficits	70% of bus drivers tested till …9x	Operations manager (= op.ma) / Official examiner	- -						1	-	-	 1	.000 .000	-		Computer paper				Travel allowances for tests	2,000			Employment records up to date: Official examiner cooperates
2.1.1 Devise test	Multiple choice test agreed on by …9x	Op.ma/ Official examiner	- -						1/4			 1/4	250 250	-		Computer				For examiners	50			
2.1.2 Sample testing	Variations in test results are significant	Op.ma/ Official examiner	-						1/4			-	250	-		Paper				For drivers For Examiners	1,750 150			
2.1.3 Comprehensive testing	test results available per schedule	Op.ma/ Official examiner		- -					1/4			3/4	750	-										
2.1.4 Analyse deficits	Deficits are clear	Op.ma/ Official examiner-		-					1/4				250	-										

*pm = person month(s)

11.3 How to construct a Combined Workplan and Project Budget

Step 1: Transfer the activities from the Project Planning Matrix to the first column of the workplan, and where necessary specify with. Define necessary **sub-activities.**

Step 2: **For each activity *I* sub-activity:**

- specify the anticipated *milestone(s)*
- assign *responsibilities* for the implementation
- determine *the beginning and the end* of the implementation of each activity sub-activity (timing)
- specify staff requirements per activity/sub-activity (pm = person month)
- specify the quantity of *material and equipment* needed per activity/sub-activity
- specify *cost* and *cost category* for every activity/sub-activity
- specify important *assumptions and their indicators*

Step 3: Final check with focus on:

- consistency of cost with overall allocation *I* availability of financial resources.
- workload of assigned *I* responsible personnel
- consistency of the timing.

It may be advisable to transfer the reviewed workplan into a bar-chart with time axes.

The Combined Workplan and Project Budget sheet constituting the core of the Plan of Operations, will serve as the basis for further detailed operational planning: e.g. sectional workplans / budgets, half-yearly *I* quarterly plans, specific functional plans e.g. for training, procurements, etc.

11.4 Recommended Structure of a Plan of Operation (in the form of a document)

1. Summary
   Name of project, location, project executing agencies; overall goal, project purpose, background and major time schedule; indicators regarding ongoing project phase, outputs/results, major activities and resources required in the planned project period.

2. Overall Concept
   problem analysis and objectives; target groups, long-term project strategy, outputs/results, assumptions and risks for the overall project period; guarantee of the sustainability (integration planning), organization of project executing agencies, development of institutional structures; total costs.

3. Description of previous project phase (if applicable)
   Description of the situation at the beginning of the planning period; comparison of targets and actual situation, with respect to the results of previous planning period and the utilization of resources, indications concerning assumptions and major (non-scheduled) impacts, conclusions concerning subsequent planning period or overall concept (modifications, new activities, evaluations, etc.)

4. Description of upcoming project phase
   Description of project goal, the outputs/results and assumptions, providing indicators for this period; description of the major activities; the procedure followed in the individual work areas and time frame (work plan), interlinking of activities, impacts on target groups, their contributions and how they are integrated; monitoring and project controlling; description of the major organization, competencies and responsibilities of the project executing agency in the project; functions of personnel; contributions by third parties; how funds are managed; organization of cooperation in project (coordination, work-flows, communications, etc.)

5. Contributions by the partner organization. the funding agencies and by third parties to the ongoing project period
   Project budget
   Personnel plan
   Staff training plan
   Material & equipment plan / procurement plan

6. Monitoring and Reporting
   Deadlines for reports, addressees, deadlines for replanning, evaluations.

7. Appendices
   Problem tree for entire project period
   Objectives tree for entire project period
   Project planning matrix for entire project period
   Project planning matrix for upcoming project period
   Monitoring and evaluation documents
   Organization chart for project executing agency and for the project
   Job descriptions of project staff (expatriate and local personnel)
   List of available planning documents