INTRODUCTION TO PROJECT PLANNING & LF ANALYSIS

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TOPICS TO BE DISCUSSED

- Overview –selecting the best projects for implementation
- Understanding various aspects of a project
  - What is (and what is not) a project
  - Different aspects of a project
- Project cycle and project formulation
  - Need analysis, problem/objective analysis,
- Logical Framework analysis
  - Formulation of goals, objectives, activities, indicators

Overview

- SL has become a middle-income country-
- Our per capita income raised from US$ 1,062 in 2004 to US$ 2,053 in 2009
- The composition and the form of foreign financing have changed over last few years due to the graduation of SL to middle income country status.
- The concessional assistance from western bilateral partners have reduced while financing in the form of export credit have increased.

Overview

- Economy is rapidly moving towards a modern, business friendly & export oriented economy.
- Systems will change more frequently aiming higher productivity, higher quality & customer friendly services.
- Demand for resources is becoming more.
- Sequencing of projects and identifying appropriate funding arrangements will be done by the government within the resource limits.

Overview

- Therefore, it is necessary choose the best proposal among large number of competing proposals for implementation.
- Main criteria- The project should be capable enough to generate sufficient revenue to repay the loans or other benefits to justify the investment.
- How much you will get?..... Will depend on your capacity to make a good deal with resource providers.
- A well formulated comprehensive project proposal will enhance your capacity to negotiate for a better deal.

SRI LANKA: The emerging Economic Hub in the region

Medium term goals

National development Vision, Goals & Ob

- **Naval Hub**
- **Aviation Hub**
- **Energy Hub**
- **Commercial Hub**
- **Knowledge Hub**

✓ Increase per capita income to well above US$ 4,000
✓ Maintain continuous growth rate of 8% per annum during next 6 years
✓ long-term sustainable growth
✓ Benefits filter down to the people

NATIONAL DEVELOPMENT VISION, GOALS & OBJECTIVES

Development framework envisages a Sri Lanka that:

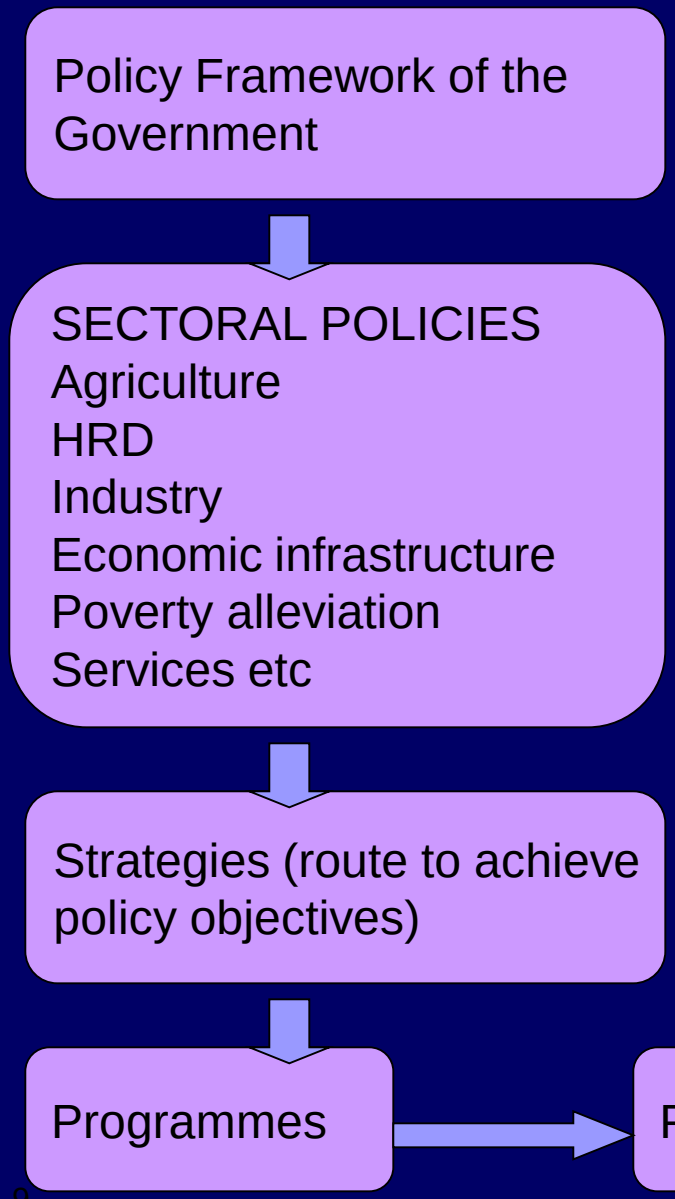
1. has an economy with a green environment and rapid development;
2. aspires to be a stable society with a high quality of life for all of its people having access to decent living, electricity, water, schooling and health;
3. maintains the best of Sri Lankan culture, traditions and long standing global identity;

NATIONAL DEVELOPMENT VISION, GOALS & OBJECTIVES

Development framework envisages a Sri Lanka that:

4. aims to consolidate as an emerging market economy, integrated into the global economy, and competitive internationally; and
5. intends to have the characteristics of a middle income economy with a knowledge-based society.

Policies to actions



Policy and strategy are closely interlinked. Policy is the decision and statement of direction. Strategy is how to reach the desired direction.

E.g. Policy objective: to preserve and maintain archeological sites satisfactorily in the long-run

Strategy: Provision of necessary resources for cost effective maintenance.

What is Programme?

- Organization of activities, projects, processes or services which are brought together to achieve specific policies.
- Usually comprise of several projects
- They can refer to the overall sectoral effort (e.g., livestock / health programme)
- They may have a functional focus (e.g., Human resources development)
- May consists of different types of projects, supporting a broader effort (e.g., road, agricultural, forestry & health projects)
- May be national, regional, provincial or local in scope.

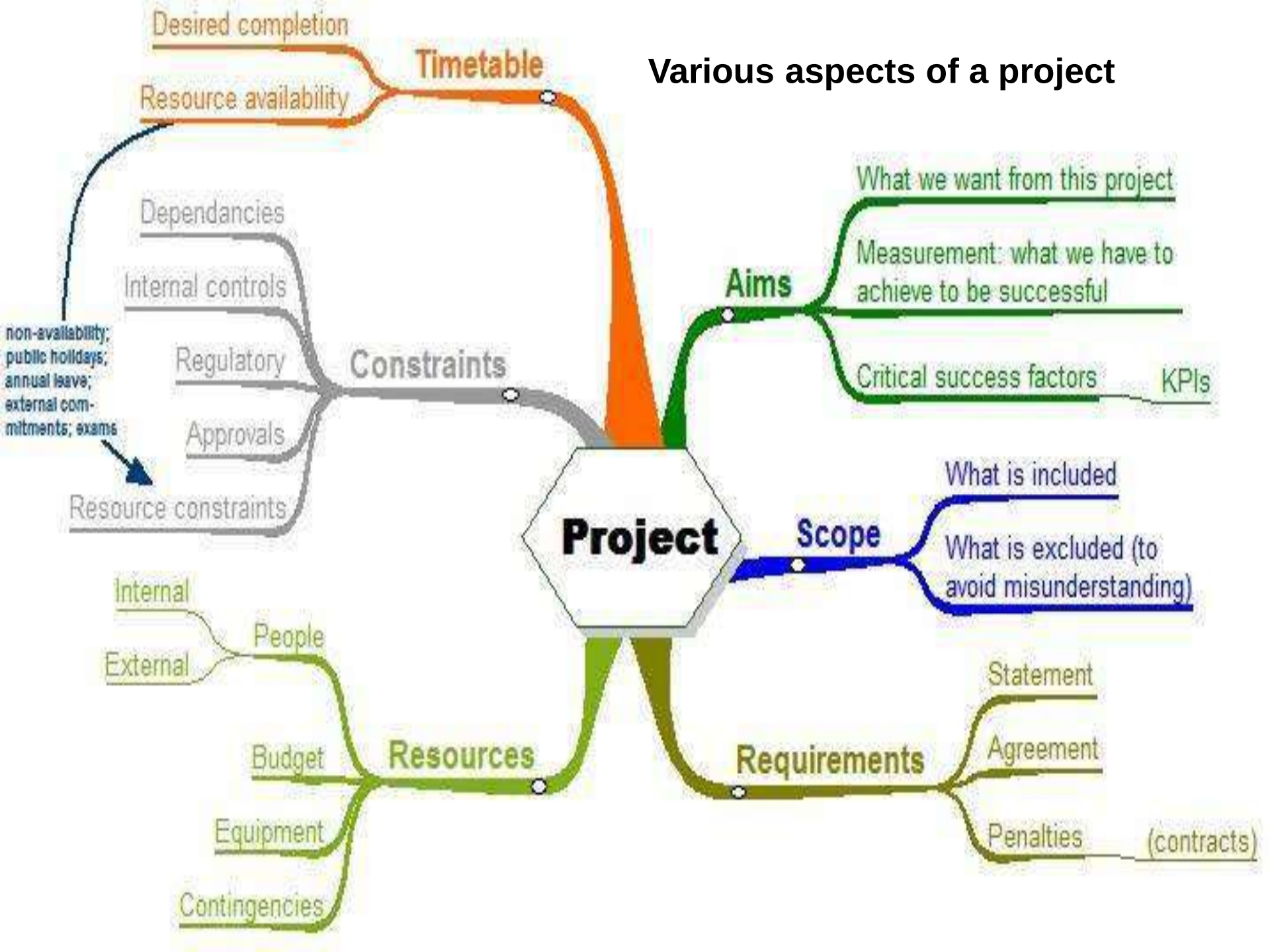
What is (and What is NOT) a project?

- A project is a time-bound intervention consisting of a set of planned and interrelated activities executed to bring about a beneficial change.
- It has a start and a finish
- It has pre-defined outputs, outcomes & impact goals
- involves a multidisciplinary team collaborating to implement activities within constraints of cost, time and quality
- has a scope of work that is unique and subject to uncertainty.

Project is not:

- past activities that are repeated in exactly the same way on a periodic basis;
- activities with no clearly defined goals;
- activities which can be repeated or transplanted anywhere at any moment; or
- ongoing (regular) organisational activities (e.g. board meetings).

Various aspects of a project



Why projects fail?

- Inadequate preparation
  - Lack of data, out dated information, inadequate background information
- Too many objectives, vague objectives
- Unrealistic time targets
- Unrealistic assumptions- labour cost
- Poor feasibility studies- no ownership
- Inadequate supervision & monitoring
- Natural causes

- Projects link policy initiatives at a higher level (eg national or sectoral) with a specific problem faced by a target group of local-level stakeholders or organizations.

National Policy?

My problem?

Linking projects to national policy

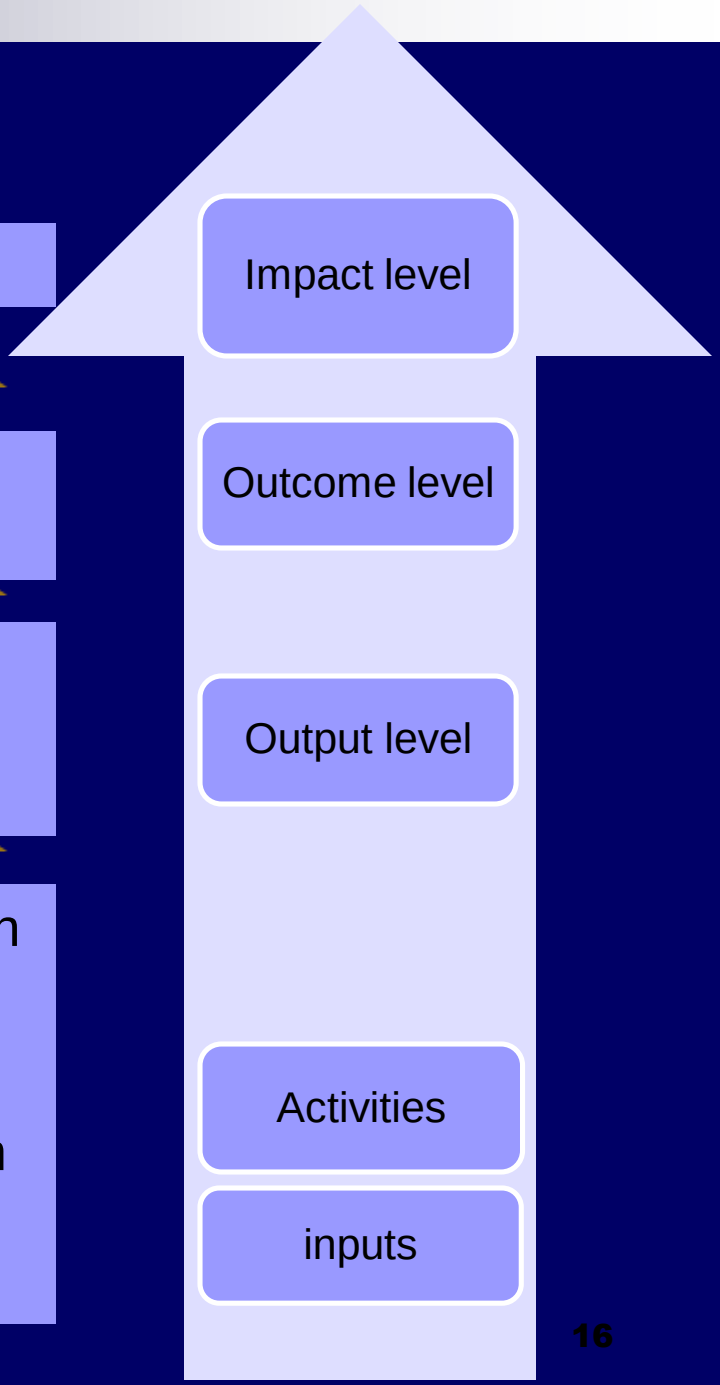
Sustained economic growth

Contribution to DGP from Southern Province increased by 2%.

Number of tourists visited worship & archeological sites in the Southern Province has increased by 50% in 2005

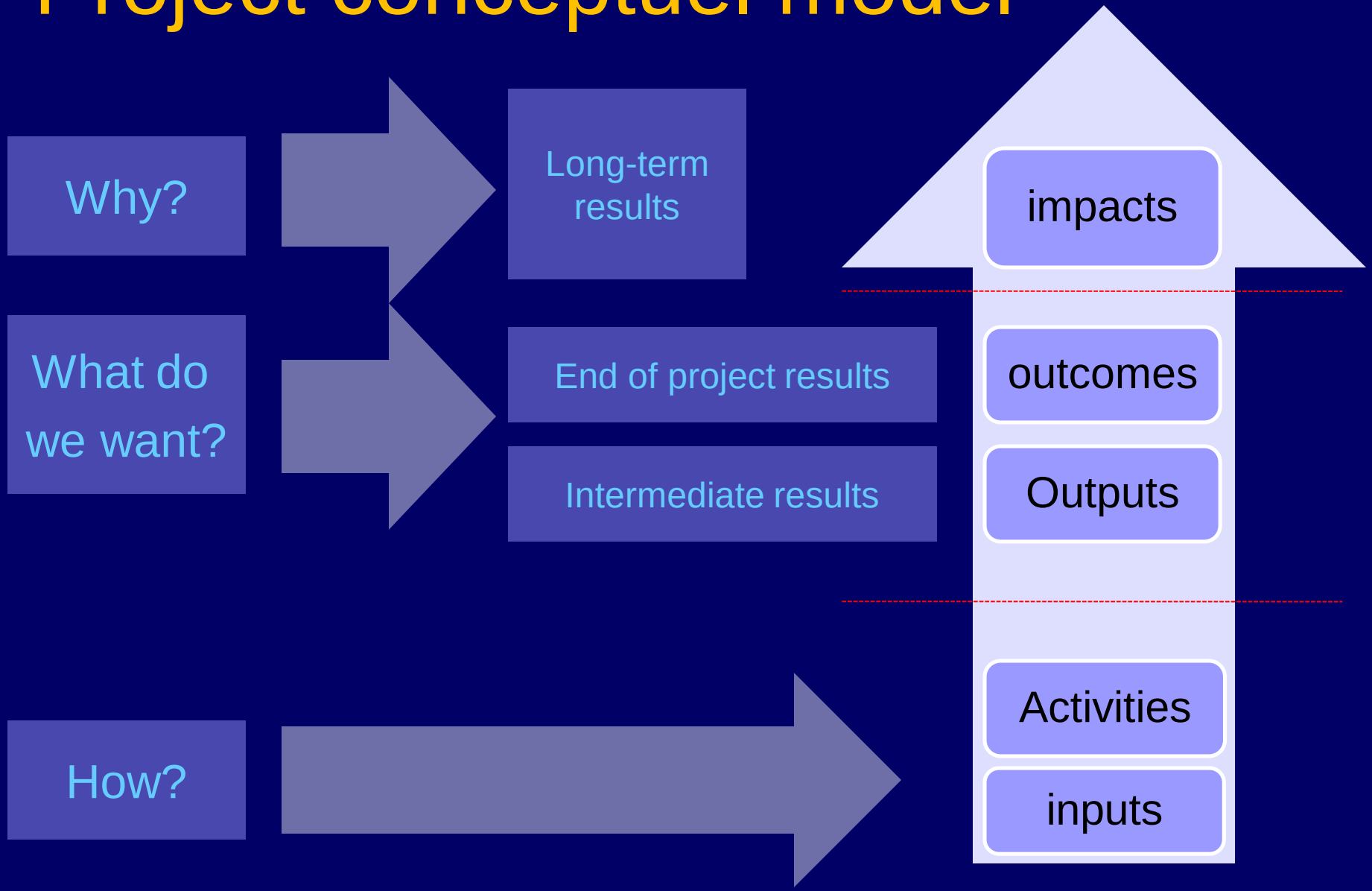
X no. of worship places & Archeological sites in the southern province were provided with proper sanitary facilities

Y no of new archeological sites in the southern province were restored and opened up for public

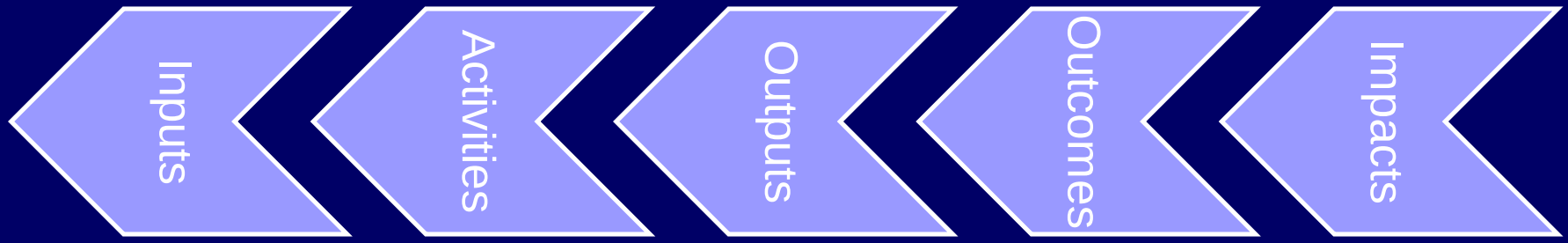


Project Formulation

Project conceptuel model



Project conceptuel model

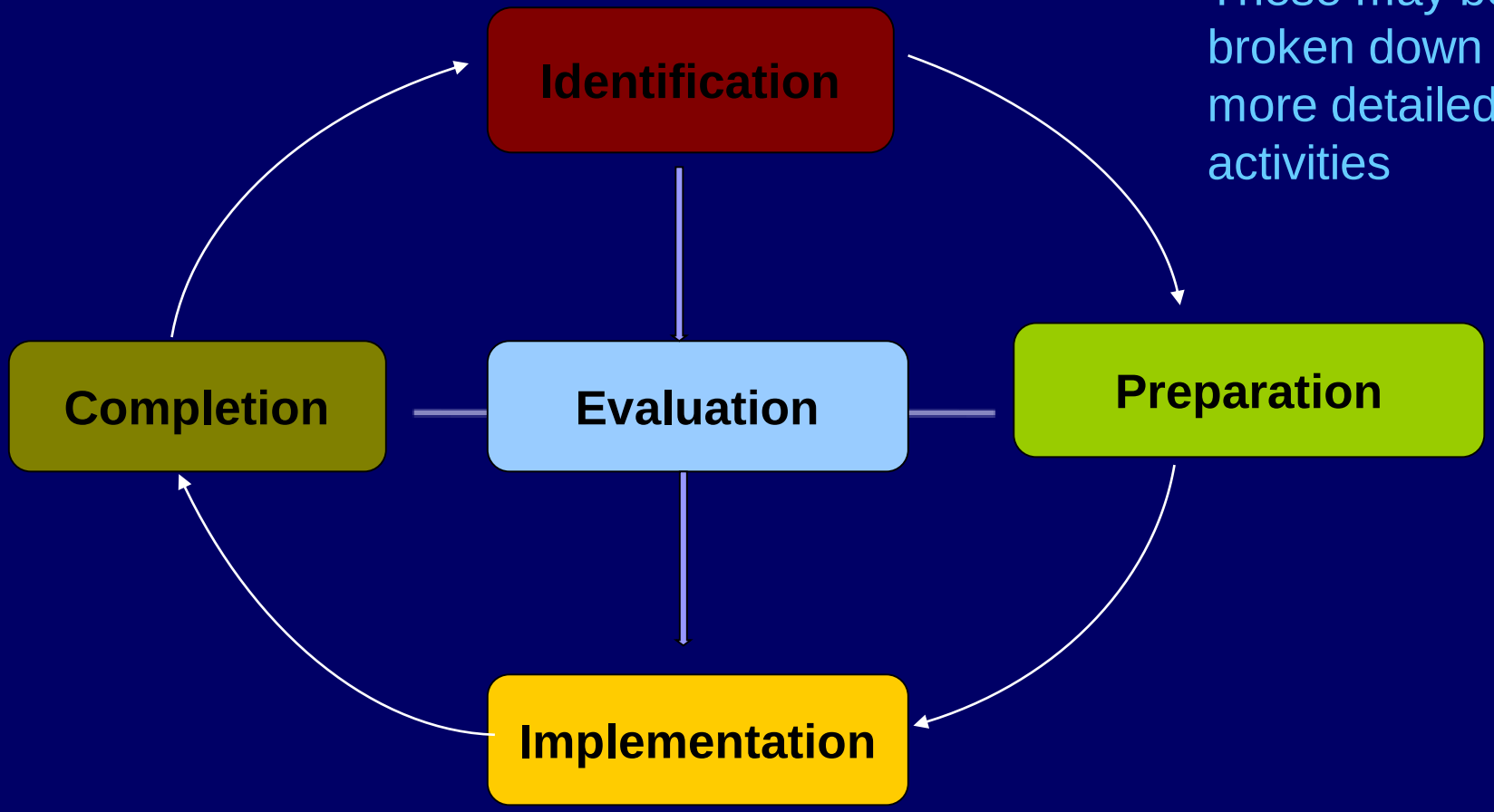


Working backwards, the project proposal formulator identifies -

- the outcomes that are needed to achieve the desired impact,
- the outputs needed to achieve the desired outcomes,
- the activities that must be carried out to achieve the outputs, and
- the inputs needed to carry out the activities.

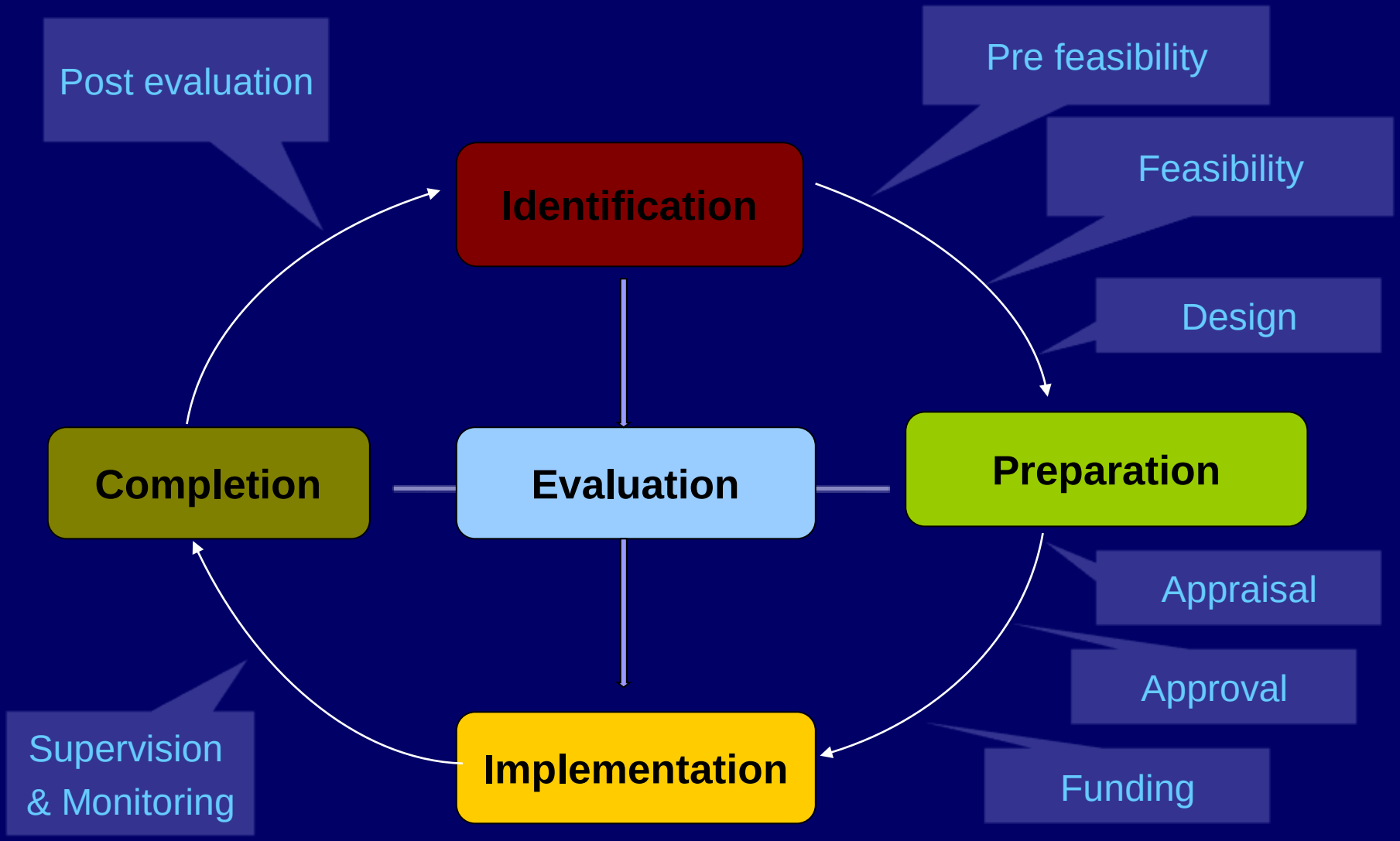
Project Cycle

The project approach to development may be seen as a cycle of activities or steps. The four main steps are-



These may be broken down into more detailed activities

Project Cycle



Project Cycle

Project cycle is used as a management tool to help plan & implement better development Projects, It helps to-

Identify potential projects which are consistent with national policies and priorities

Incorporate those ideas into project design

Implement projects according to the sound management practices

Learn from past experience

Project Identification

Projects are proposed and prepared by concerned ministries/ departments. Projects can be identified using different methods

1. Review Government Priorities / Plan Documents-

Link the project with National and Annual Development Plans.

The order of priority assigned to each project depends on

- the viability and desirability of the project's impact on national economic growth,
- social development,
- generation of greater resources/ revenues and
- overall Government policy.

All such potentially promising projects are identified and included in the national development plan (Project pipeline), subject to expected resource availability.

2. Sectoral Analysis and Current Situation-

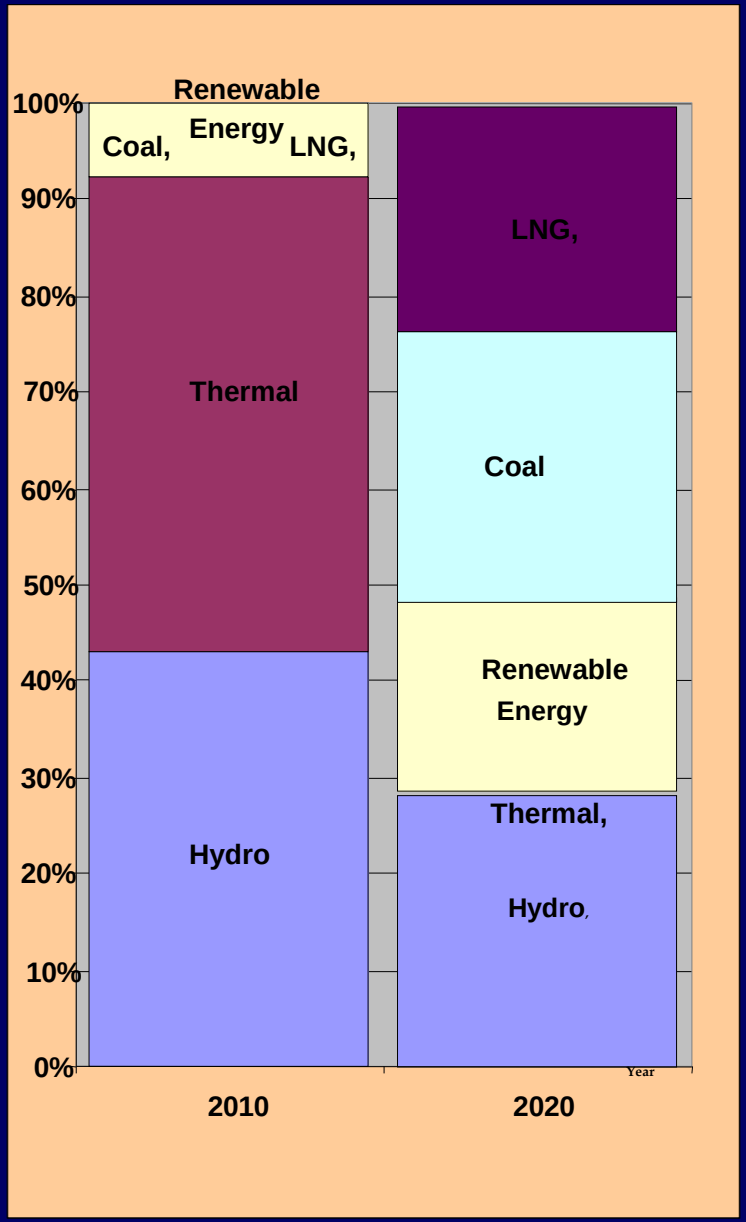
E.g., Power (issues)
Inadequacy and high cost of electricity generation: The generating system is at present severely constrained in terms of its capacity, while the average cost of production remains high.

Inadequacy of Transmission and Distribution

High cost and price of electricity

High debt burden of the electricity sector

High price of petroleum products



3. Special policy Directives

"I will take the necessary steps to provide 100 percent of households with continuous electricity by the end of 2012." - (Mahinda Chintana 2010, pp 44 & 45)

the capacity of electricity generation needs to be increased to 3470 MW in 2012 and 6367 MW in 2020. Setting up of coal fired power plants and hydro power plants to promote low cost electricity will be encouraged.

4. New Ideas/Areas of Investment

E.g., the proposed telecom (Lotus) tower (Nelum Kuluna)

Feasibility study

- Deciding the necessity
  - Implementing Vs abandoning – which is more beneficial?
    - Types of feasibility
      - Technical
      - Financial
      - Social
      - Environmental

      } Economic Feasibility
    - Quantifying benefits and costs
      - Payback analysis
      - Net Present Value Analysis
      - Return on Investment Analysis
    - Comparing alternatives

Feasibility study

Objectives:

- To find out if the project can be done:
  - ...is it possible?...doability
  - ...is it justified?....value for investment
- To suggest possible alternative solutions.
- To provide management with enough information to know:
  - Whether the project can be done
  - Whether the final product will benefit its intended users
  - What the alternatives are (so that a selection can be made in subsequent phases)
  - Whether there is a preferred alternative

After a feasibility study, management makes a “go/no-go” decision.

Technical Feasibility

- Is the proposed technology or solution practical?
  - What type of technology we have at present?
  - Do we possess the necessary technical expertise
- What kinds of technology will we need?
  - Some organizations like to use state-of-the-art technology
  - …but most prefer to use mature and proven technology.
  - A mature technology has a larger customer base for obtaining advice concerning problems and improvements.
- Is the required technology available “in house”?
  - If the technology is available:
  - …does it have the capacity to handle the solution?
  - If the technology is not available:
  - …can it be acquired? (affordability)

Financial Feasibility

The objective of financial analysis is to ascertain

- Is the project employing the least cost method ? (cost effectiveness)
- Will the proposed project be financially viable?
- Will it be able to meet the burden of servicing debt?
- Will it satisfy the return expectations of the Treasury or those who provide the capital?
- While conducting a financial appraisal certain aspects has to be looked into like:
  - - Investment outlay and cost of project
  - - Means of financing
  - - Projected profitability
  - - Break- even point
  - - Cash flows of the project
  - - Investment worthiness judged in terms of various criteria of merit
  - - Projected financial position

Economic Feasibility

- Micro looks only at the market for a particular good. For example, the supply, demand, price, etc. Macro is concerned with "the economy" as a whole. A judgment of whether solving the problem is worthwhile.
- Estimation and incorporation of non-market costs and benefits where markets do not exist for the goods or services being evaluated.
- The economic analysis should answer questions such as,
  - Should the project be built at all?
  - Should it be built now or later?
  - Should it be built to a different configuration or size?
  - Will the project have a net positive social value for Sri Lankans irrespective of to whom the costs and benefits accrue?

Difficulties- benefits and costs can both be intangible, hidden and/or hard to estimate

Table 1-1 Comparison of economic vs. financial analyses

	Economic analysis	Financial analysis
Analysis perspective	Can vary from individuals, communities, state, and/or national; DWR uses statewide perspective	Project beneficiaries
Evaluation period	Economic life of project (usually 50 to 100 years)	Bond repayment period (usually 20 years)
Adjustment for inflation	Exclude inflationary effects; price changes different from inflation can be included (escalation)	Include inflationary effects
Project input valuation	Project inputs valued using their economic opportunity costs[a]	Project inputs valued using their purchase costs
Adjustment for benefits and costs over time	Determine present values using economic discount rate	Determine present values using financial discount rate
Discount rate	Economic discount rate; real rate of return (excluding inflation) that could be expected if money were invested in another project; DWR currently uses 6%	Financial discount rate; financial rate of return (including inflation) that could be expected if money were invested in another project; DWR uses expected interest rate of bonds sold to finance project
Interest paid on borrowed funds during construction	Not included (financial cost)	Included; DWR uses State revolving fund cost
Forgone investment value during construction	Included; real rate of return that could be expected if construction funds were invested in another project (opportunity cost)	Not included
Financial costs	Not included	Included

Benefits

Tangible Benefits

- Readily quantified as Rs values

  Examples:

  - increased production
  - cost/loss reductions
  - increased throughput/efficiency
  - increased margin on sales
  - more effective use of staff time

Intangible benefits

- Difficult to quantify, But maybe more important!

  Examples:

  - increased flexibility of operation
  - higher quality products/services
  - better customer relations
  - improved staff morale
  - How will the benefits accrue?

Costs

Development costs

- Development and purchasing costs:
- Cost of development team
- Consultant fees
- software used (buy or build)?
- hardware (what to buy, buy/lease)?
- facilities (site, communications, power,...)

Operational costs:

- training personnel,
- System Maintenance:
- hardware (repairs, lease, supplies,...) & software (licenses and contracts),
- Facilities
- Personnel:

Do cost/ benefit analysis using IRR, NPV, B/C

Feasibility study contents

1. Purpose & scope of the study
   - Objectives (of the study)
   - who commissioned it & who did it,
   - sources of information,
   - process used for the study, & how long did it take,…
2. Description of present situation
   - organizational setting, current situation.
   - Related factors and constraints.
3. Problems and requirements
   - What's wrong with the present situation?
   - What changes are needed?
4. Objectives of the new system.
   - Goals and relationships between them
5. Possible alternatives
   - …including 'do nothing'.

Feasibility study contents

6. Criteria for comparison
   - definition of the criteria

7. Analysis of alternatives
   - description of each alternative
   - evaluation with respect to criteria
   - cost/benefit analysis and special implications.

8. Recommendations
   - what is recommended and implications
   - what to do next;
   - E.g. may recommend an interim solution and a permanent solution

9. Appendices
   - to include any supporting material.

Case study – Road sector

- Government policies demand that cost effective and innovative techniques of design, construction, maintenance & rehabilitation
- Potential for private investors to construct new infrastructure
- Unreliable estimates- vehicle operating cost
- Failure to address institutional performance issues
- Wrong pricing mechanisms & cost recovery
- Adverse environmental impacts
- Failure to recognize correct socio cultural factors
- Attention should be given to factors that influence demand
- Construction cost and standards need to be appropriate
- Match the local institutional capacity and economic capacity to operate, maintain and replace the facilities in future.

- Distribution of benefits

Project formulation….the process

Situation Assessment

- Stakeholder analysis
- Problem analysis

Solution Development

- Objective Analysis
- Project Strategy

Steps in project formulation

- Initial Project idea
- Elaborate a project concept
- Institutional /stakeholder analysis
- Problem & Objective analysis
- Definition of objectives & design of interventions (Outputs & activities)
- Identification of assumptions & preconditions

Steps in project formulation

- Definition of indicators
- Completion of Logical framework matrix
- Work plan & Budget
- Finalize proposal writing
- Submission

Stakeholder analysis

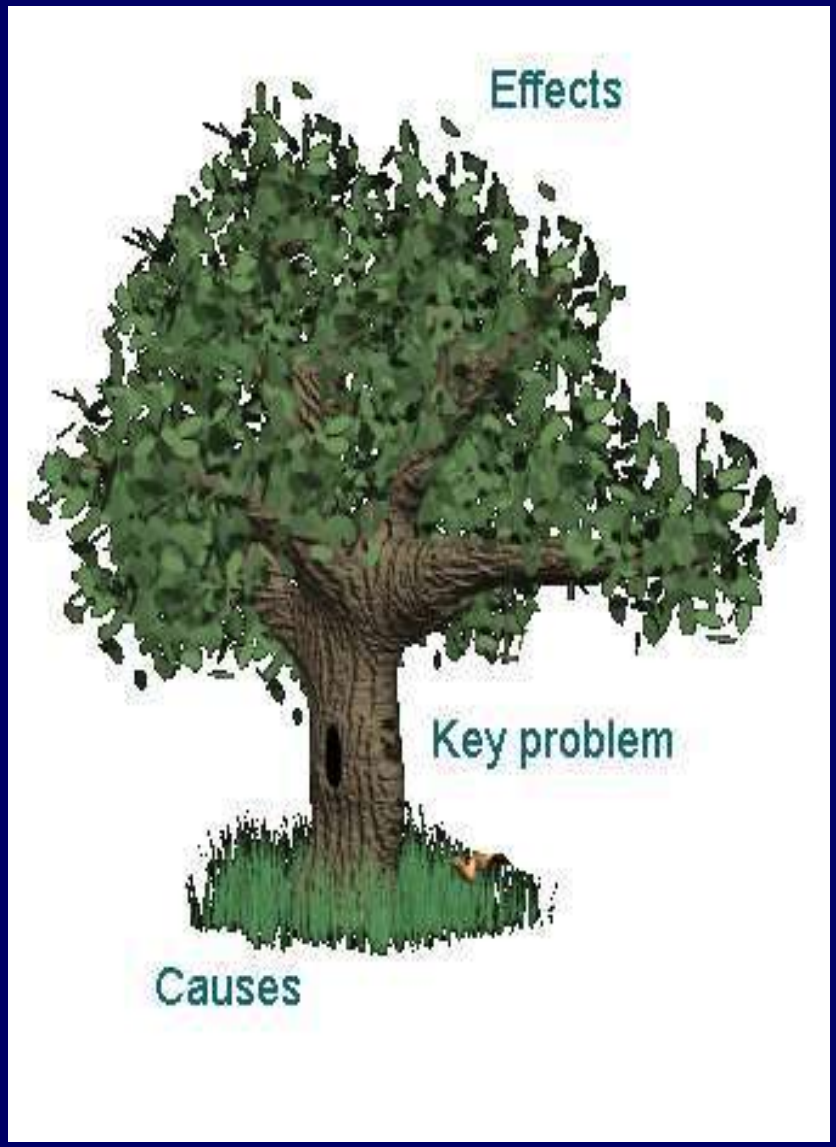
- Identify people, groups and institutions, who will influence your project (+vely/ -vely)
- Anticipate the kind of impact these groups will have on your project
- Develop strategies to get the most effective support possible for your project and reduce any obstacle for successful implementation
- Possible interventions- compensation, resettlement, relocation etc

Project to strengthen timber-processing capacity, northern Silvania

Stakeholder group	Characteristics	Problems, needs, interests	Potentials	Involvement in project
Primary stakeholders				
Rural forest owners	Lack formal titles for their forests, which impedes management	Lands without title; insufficient economic options	Desire to receive assistance; belief in institutions	Primary project beneficiary
Loggers	Have logging equipment	Obsolete technology; lack of investment capital for suitable equipment; lack of training	Desire to receive assistance; belief in institutions	Primary project beneficiary
Sawmillers	Have sawmills	Insufficient and irregular supply of timber	Desire to receive assistance	Primary project beneficiary
Transport operators	Have mules or motor vehicles	Lack of training and organization for drying and storage	Belief in institutions	Primary project beneficiary
Secondary stakeholders				
Sawmillers Association	Provide service and advice to their members	Needs to improve capacity to serve its members	Desire to receive assistance	Can assist the project to reach sawmillers
Provincial forest agency	Services weakened by years of conflict	Needs support for land cadastre	Are close to forest industry operators; can implement forest development plans	Provincial forest personnel can cooperate with project

Need / Problem analysis

Problem analysis

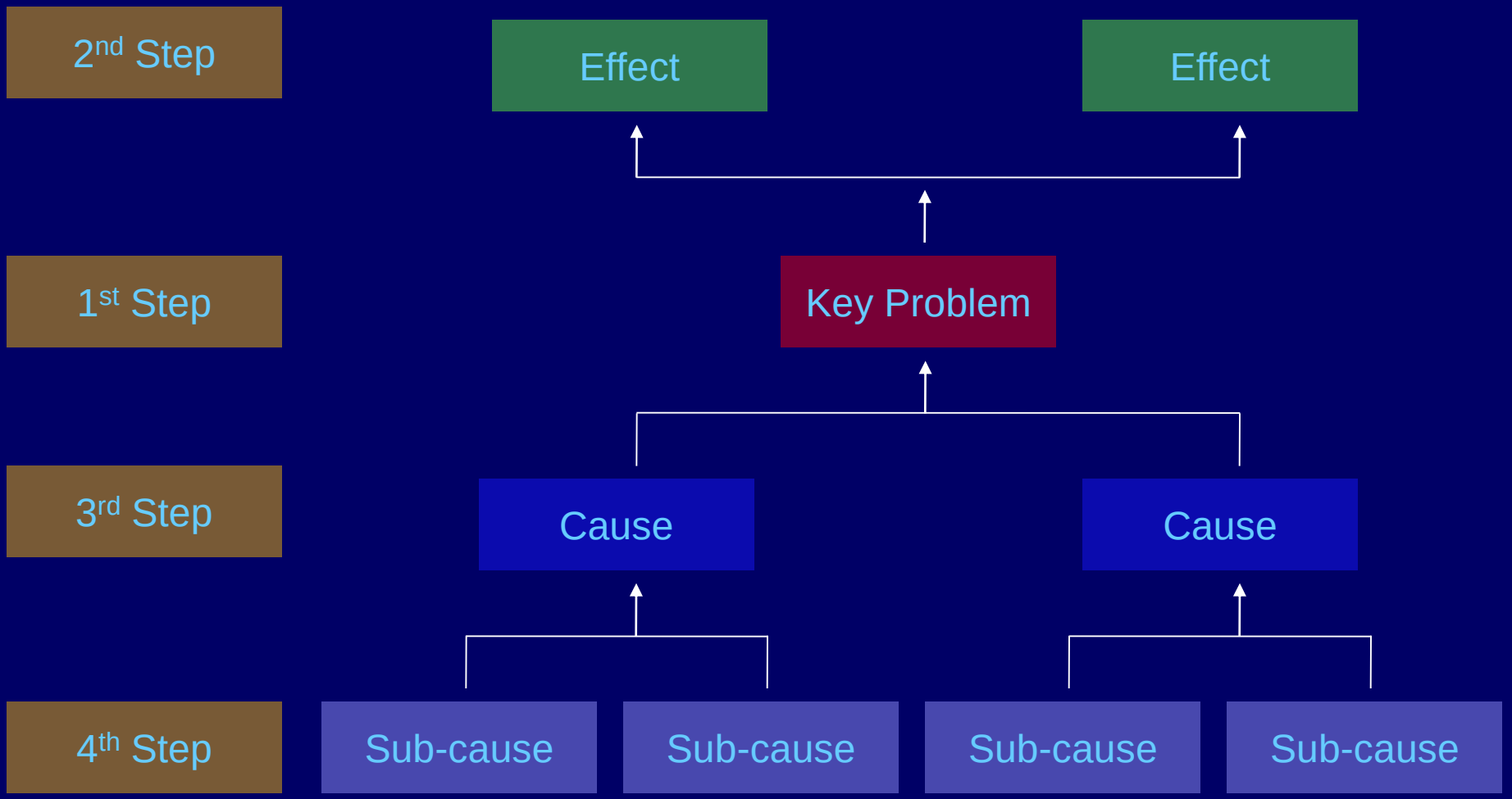


Problem Tree

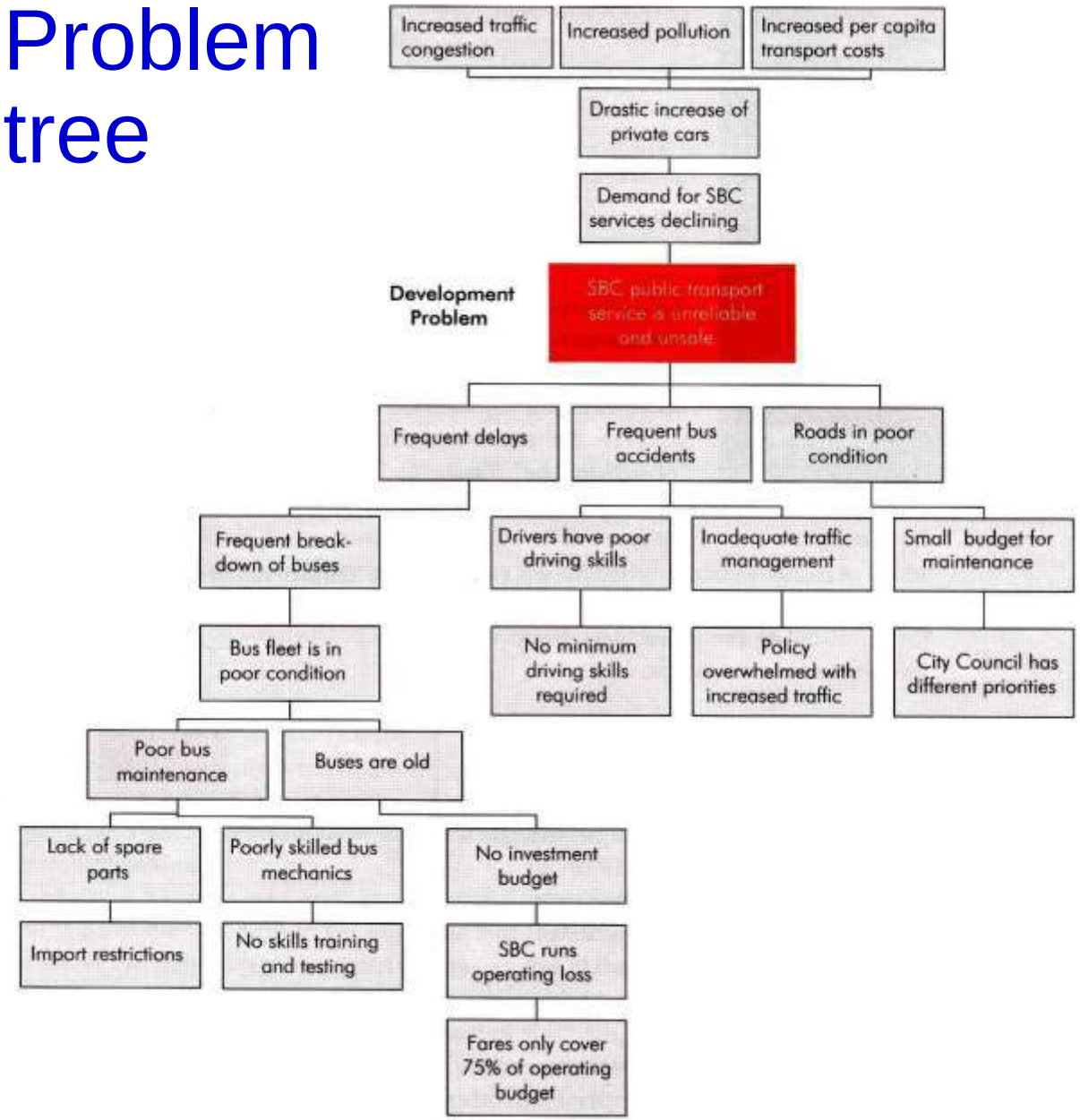
Like a real tree, the problem tree has three parts: a trunk, roots, and branches. The trunk represents the key problem. The roots represent the causes of the key problem and the branches are effects.

- The causes of the key problem might not be immediately apparent; effort is required to understand the causes in order to address the problem.

The four basic steps in problem tree analysis



Problem tree



- Are all economic, social, cultural, political, technical, biological, environmental and market dimensions of the problem considered?
- Which causes/ effects are getting better or worse or staying the same?
- Which causes are easier/more difficult to address?
- Where could a policy change help address a cause or effect, or create a solution?

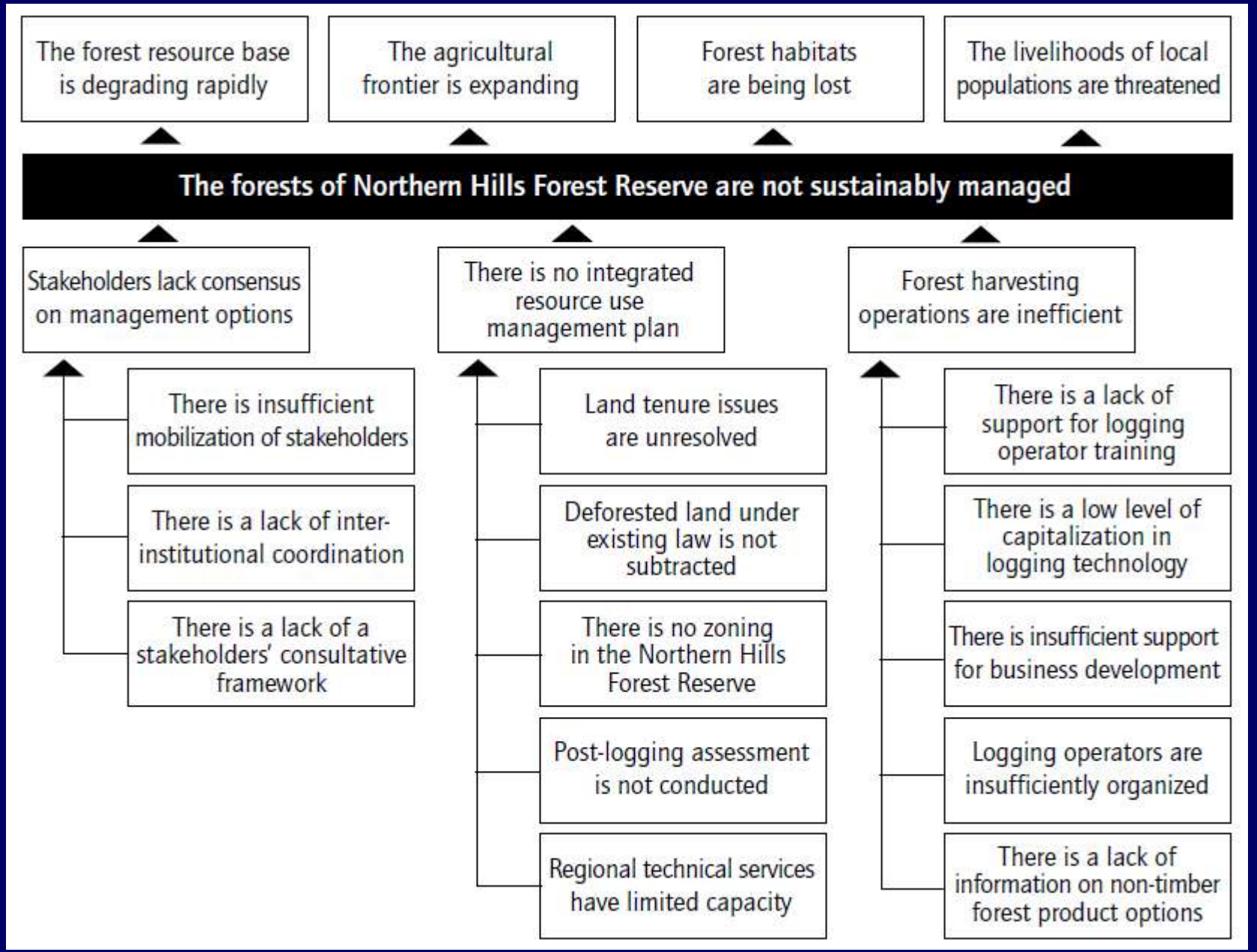
Problem tree

FORMULATE PROBLEMS

1. Identify **existing** problems - not possible, imagined or future ones
2. A problem is not the absence of a solution - but an existing **negative state**

Example:

No pesticides are available


The forest resource base is degrading rapidly
The agricultural frontier is expanding
Forest habitats are being lost
The livelihoods of local populations are threatened
The forests of Northern Hills Forest Reserve are not sustainably managed
Stakeholders lack consensus on management options
There is no integrated resource use management plan
Forest harvesting operations are inefficient
There is insufficient mobilization of stakeholders
There is a lack of inter-institutional coordination
There is a lack of a stakeholders' consultative framework
Land tenure issues are unresolved
Deforested land under existing law is not subtracted
There is no zoning in the Northern Hills Forest Reserve
Post-logging assessment is not conducted
Regional technical services have limited capacity
There is a lack of support for logging operator training
There is a low level of capitalization in logging technology
There is insufficient support for business development
Logging operators are insufficiently organized
There is a lack of information on non-timber forest product options

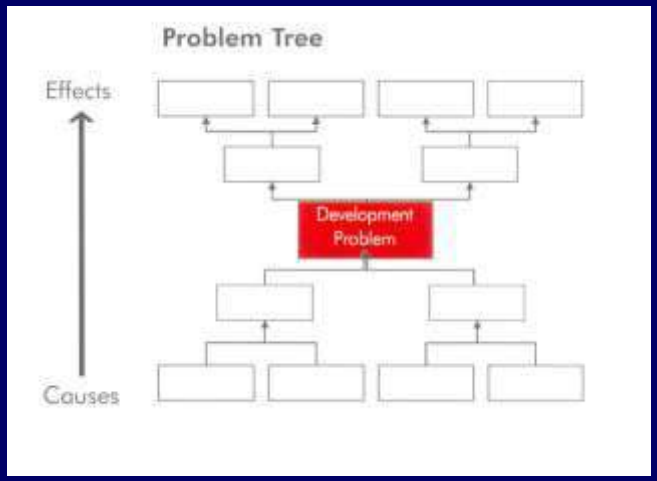
Objective analysis

Objective analysis

- Assume: there is consensus on the problem analysis, the next step is an objectives analysis.
- The problem analysis identifies problems in a cause/ effect relationship. The objectives analysis organizes the solutions in direct relation to the problems.
- Reformulate each problem into a solution: that is, the desired future situation.
- The solution shows how things will be, once the situation has improved.
- At the level of the main cause, the potential solution describe possible ways of solving the key problem.

Problem to objectives

- Change the Problems to objectives
- Develop an OBJECTIVE TREEE



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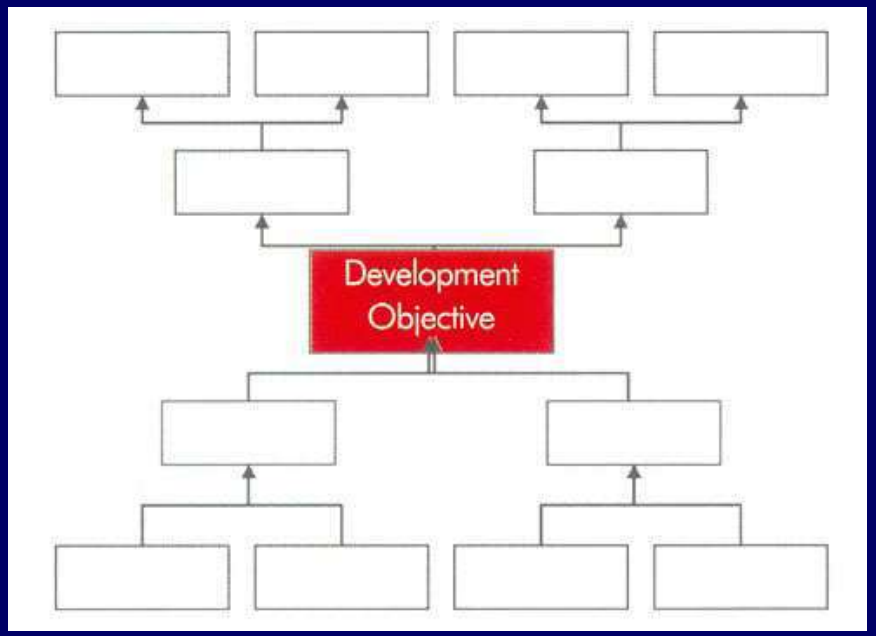


Means

Problem- Bus service is unreliable & unsafe

Development objective- Bus service is reliable & safe

Objective tree

DEVELOP THE OBJECTIVES TREE

1. Reformulate all elements in the problem tree into **positive,** desirable conditions.

2. Review the resulting means-ends relationships to assure validity and completeness of the objective tree.

3. If necessary:

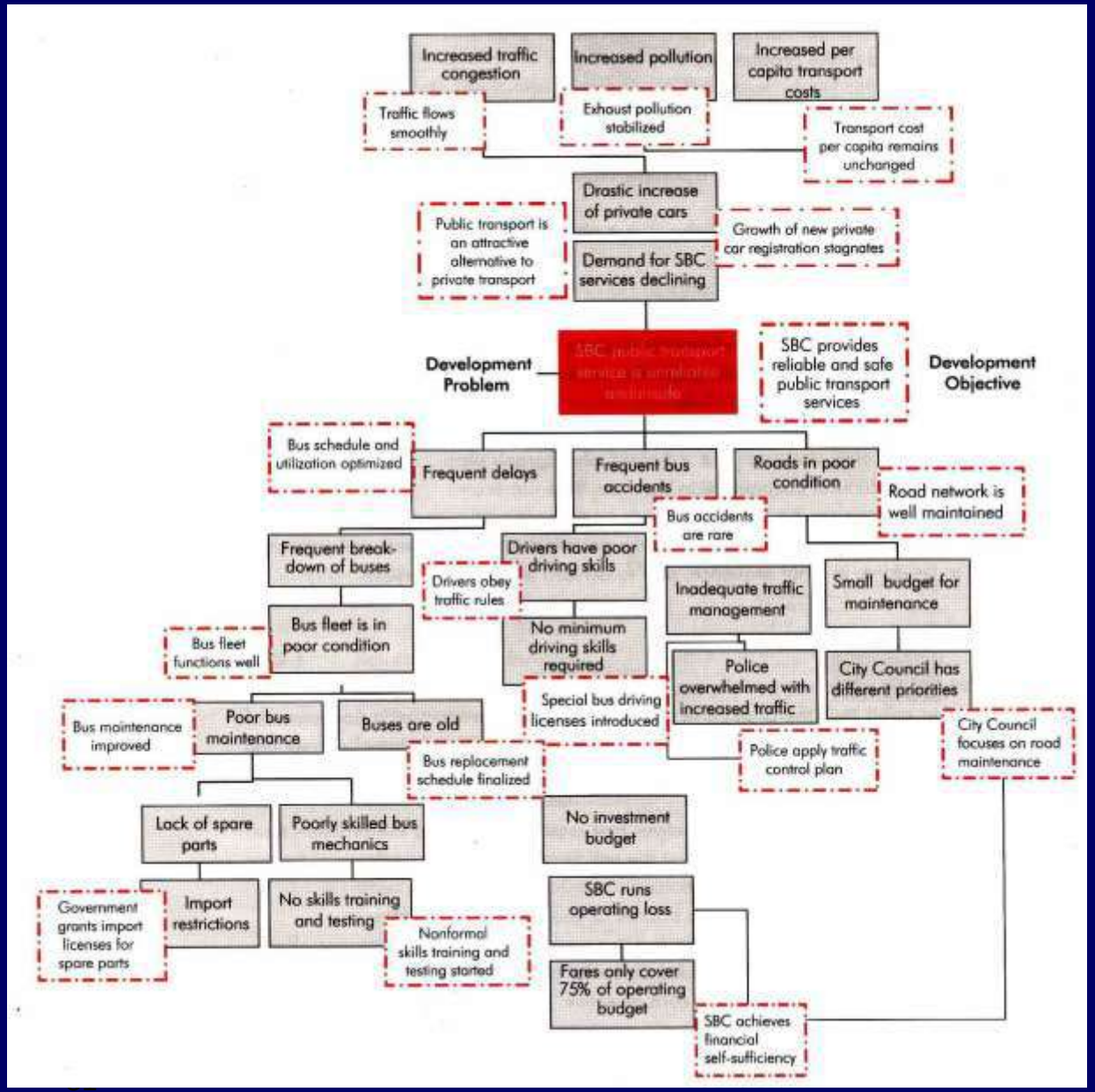
   Revise statements

   Delete objectives which appear unrealistic or unnecessary

   Add new objectives where necessary

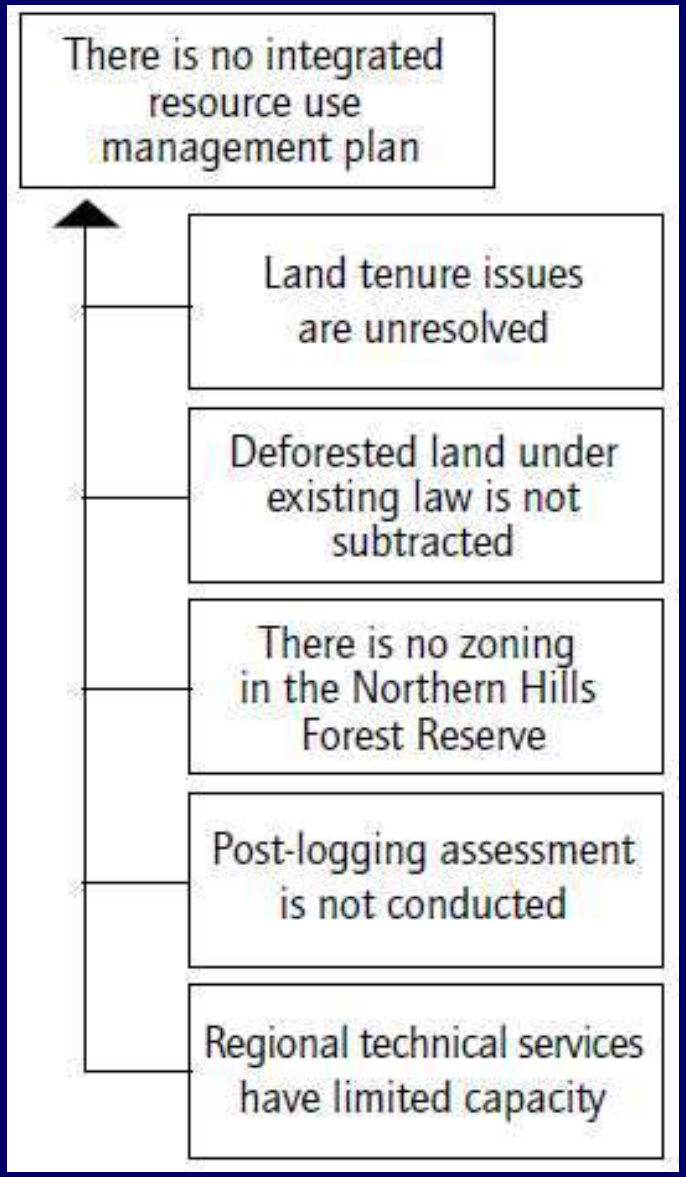
4. Draw connecting **lines** to indicate the means-ends relationships.

Objective tree



In this way, causes and effects are turned into solutions or objectives.

The root causes become root solutions, which determine the project's entry points.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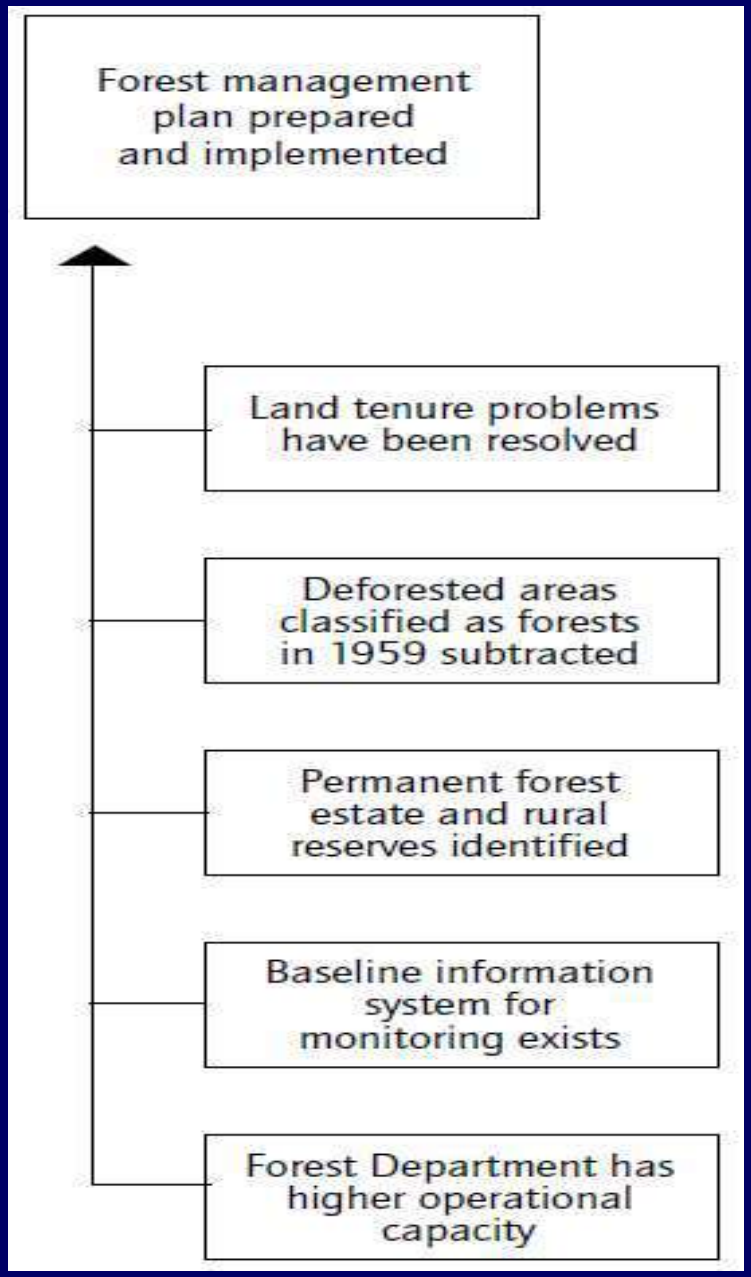
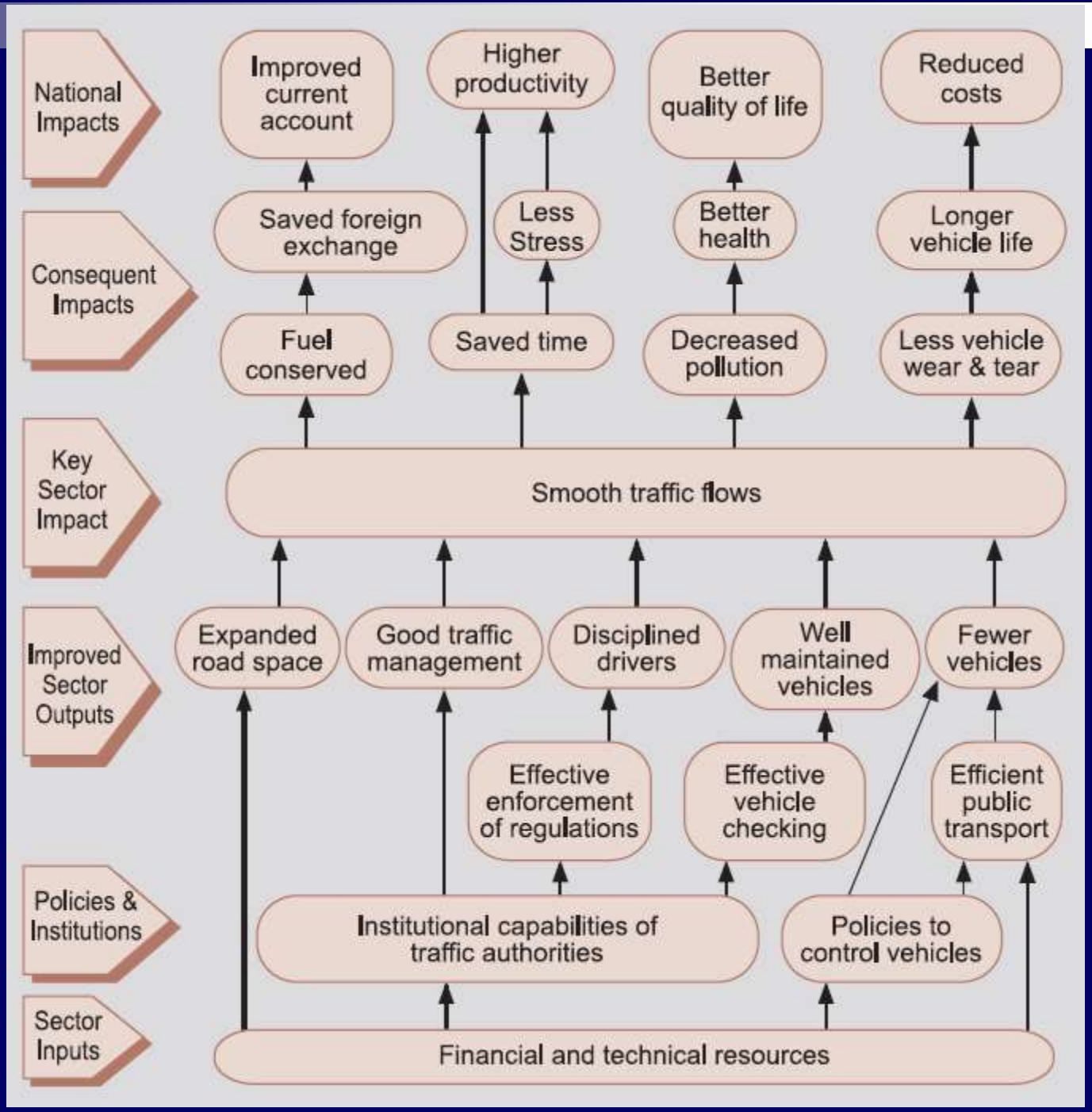
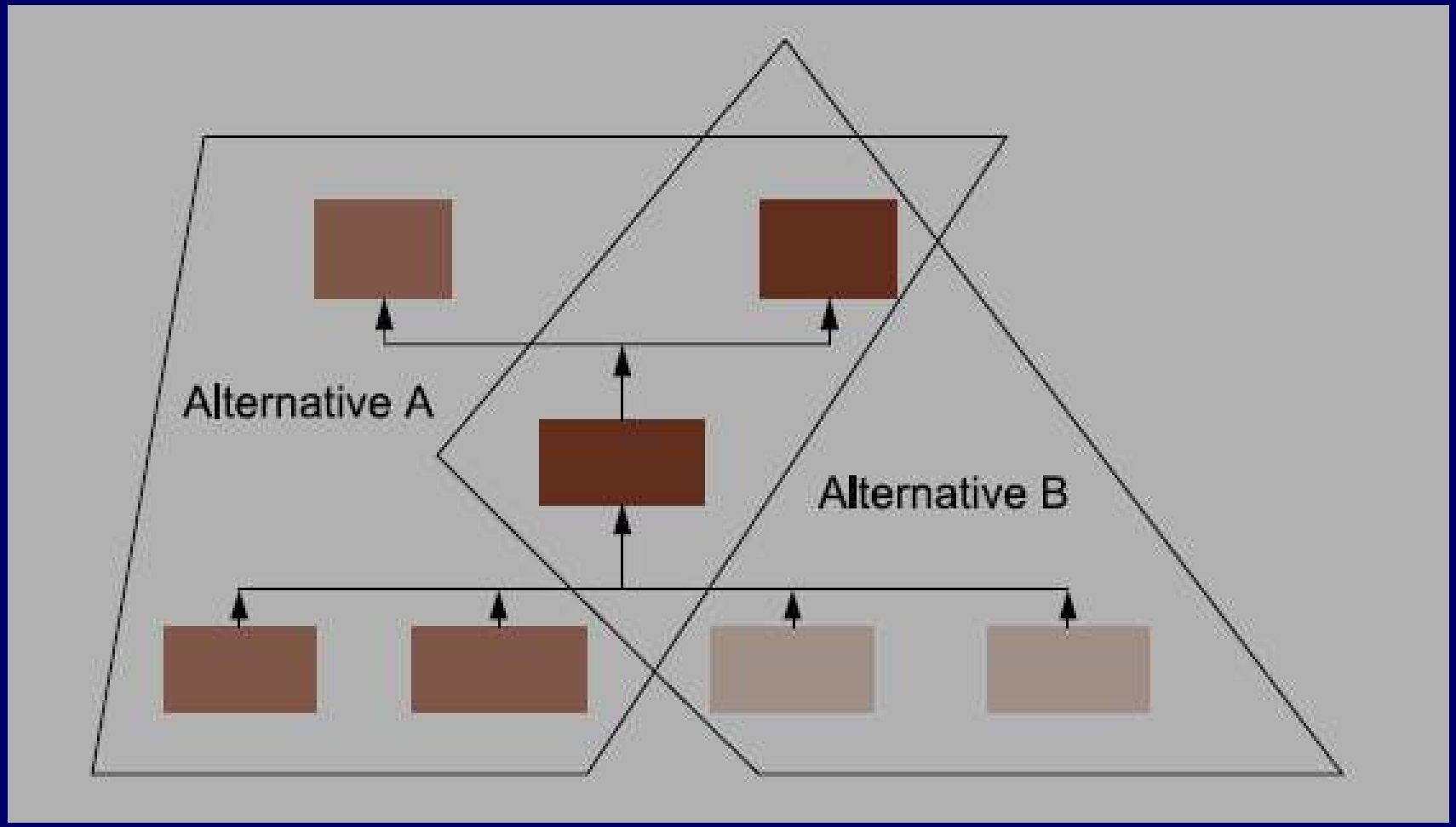

Forest management plan prepared and implemented
Land tenure problems have been resolved
Deforested areas classified as forests in 1959 subtracted
Permanent forest estate and rural reserves identified
Baseline information system for monitoring exists
Forest Department has higher operational capacity

Objective tree



SELECTING THE MOST VIABLE ALTERNATIVE



Selecting the most viable alternative

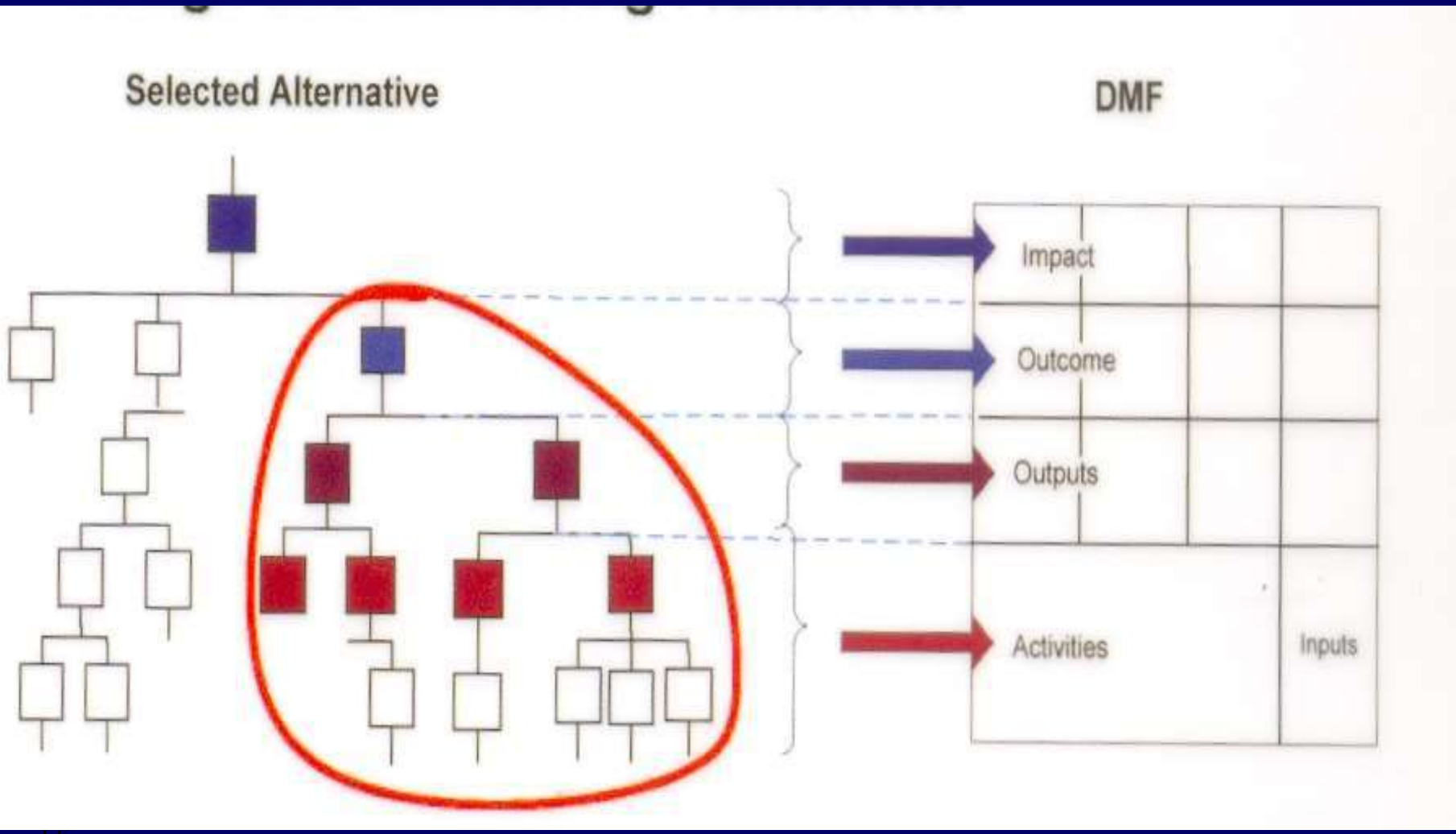
The alternative options should be considered in relation to the following criteria:

- Total cost, Benefits to priority groups
- Probability of achieving objectives, Social risks

Possible criteria could be:

Technical:	Appropriateness, use of local resources, market suitability, etc.
Financial:	Costs, financial sustainability, foreign ex-change needs, etc.
Economic:	Economic return, cost effectiveness, etc.
Institutional:	Capacity, capability, technical assistance
Social/distributional:	Distribution of costs and benefits, gender issues, socio-cultural constraints, local in-volvement and motivation, etc.
Environmental:	Environmental effects, environmental costs vs. benefits

Transferring objective tree to design & monitoring format



Logical Framework Analysis

LFA

LFA IS A TOOL FOR IMPROVING THE QUALITY OF PROJECTS

The Logical Framework Approach is an analytical tool for objectives-oriented project planning and management.

LFA Enhances Planning, Analysis & Communication

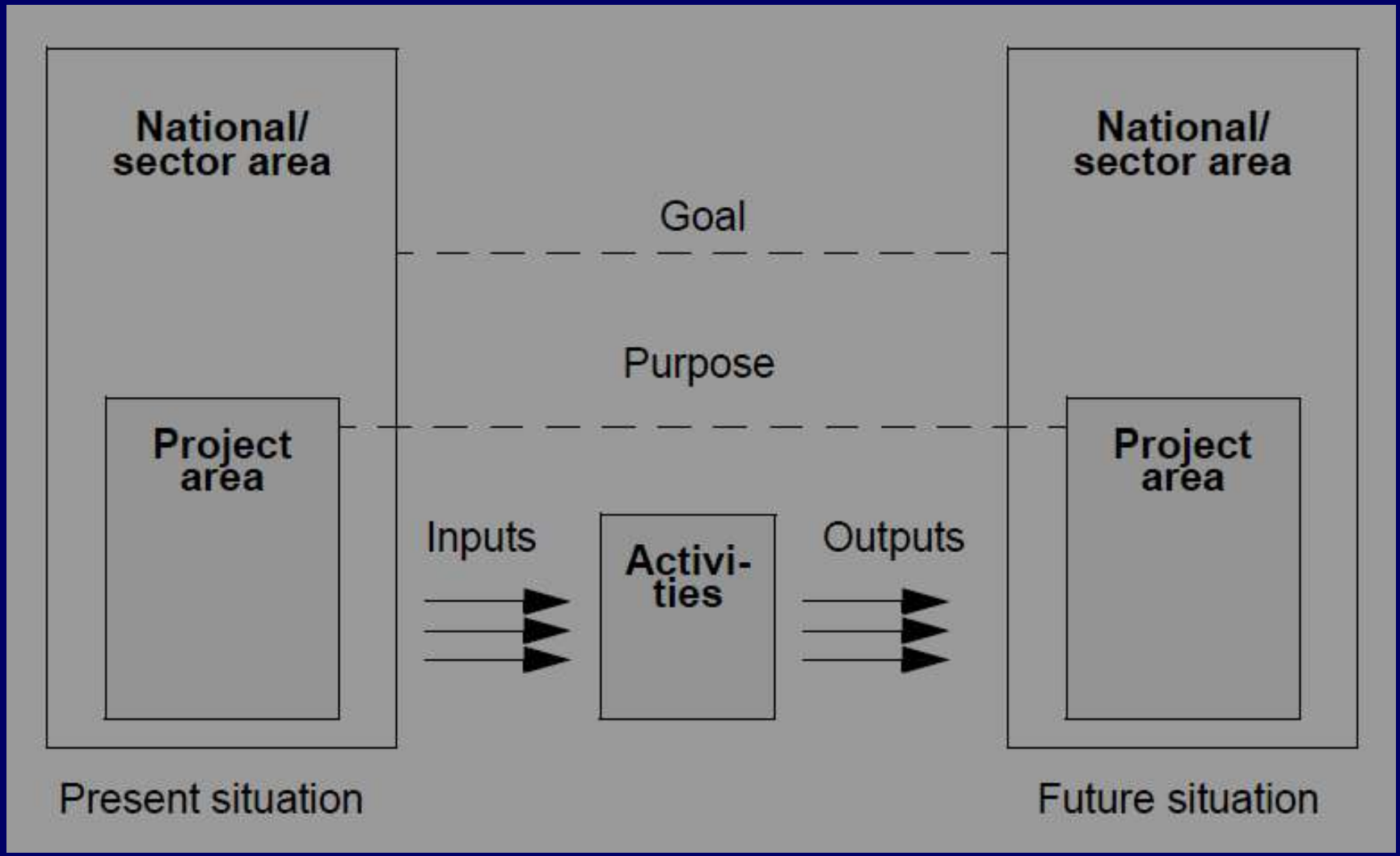
Using LFA helps:

- clarify the purpose of, and the justification for, a project
- identify information requirements
- clearly define the key elements of a project
- analyze the project's setting at an early stage
- facilitate communication between all parties involved
- identify how the success or failure of the project should be measured

LFA

- The purpose of development projects; to induce change; the results are desired within the project environment and society at large.
- We assume that there is general agreement about the improved situation before project planning takes place; agree upon the purpose and the (overall) goal of the project.
- No development projects exist in a social vacuum. It is important that the desired future situation is described in a way that results can be measured / checked at a later stage (measuring the success in relation to its objectives and the target groups).

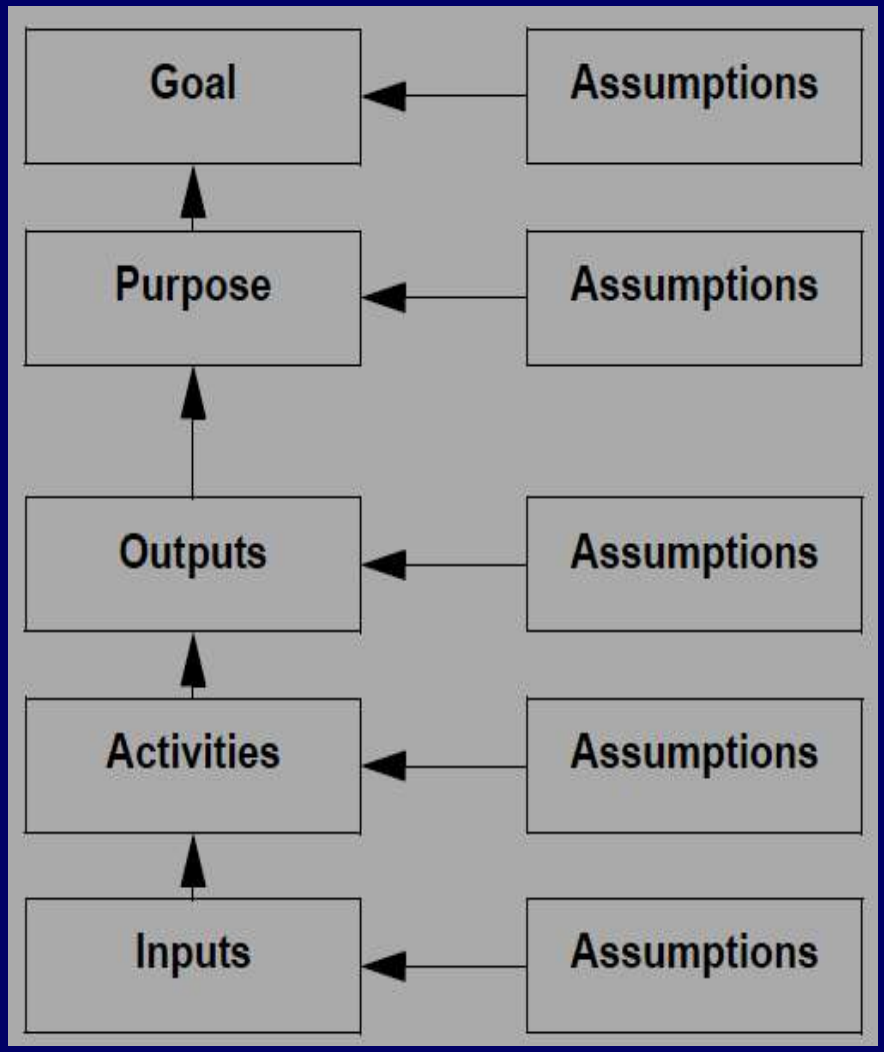
Defining the concepts in LFA



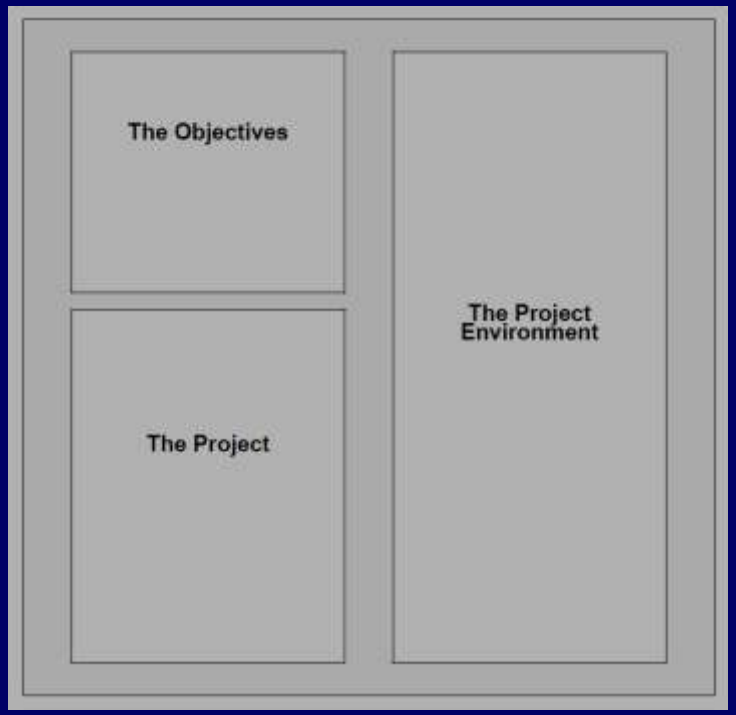
Logical Framework

We assume that:

- if the inputs are available, then the activities will take place.
- If the activities take place, then the outputs will be produced.
- if the outputs are produced, then the purpose will be achieved.
- in the long run this will contribute to the fulfillment of the goal.



Logical Framework



Horizontal division

The project is what the project administration should be able to guarantee, while the objectives are out of the immediate reach of the project administration. It is anticipated, that the project will significantly contribute to the realization of the objectives.

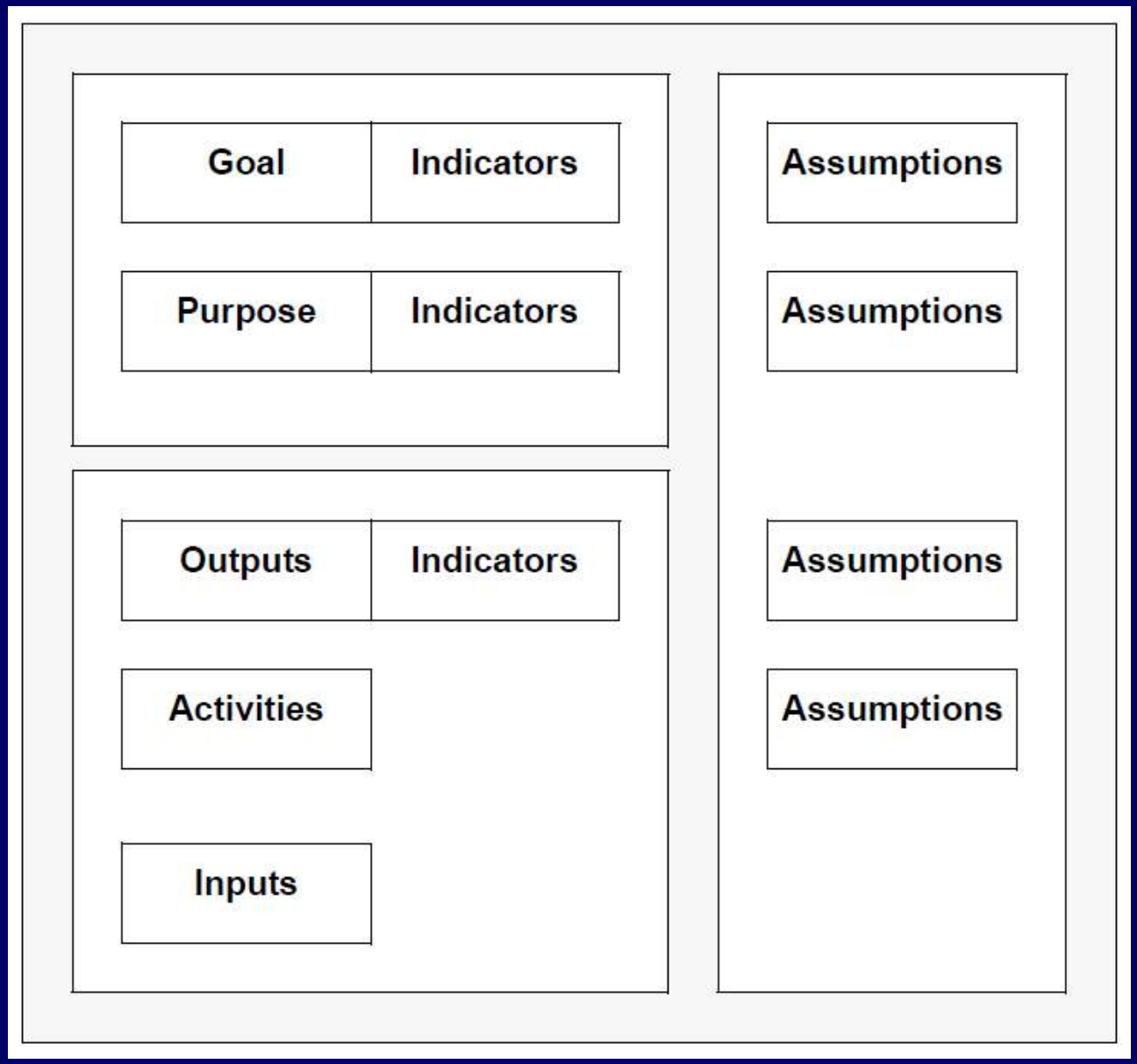
There is also an important vertical division between elements directly influenced by the project (left boxes), and the external factors outside the control of the project administration (right box). The latter are factors Which will significantly influence the success or failure of the project.

Logical Framework

Answers to the following questions:

- Where does the society want to be in the medium and long terms? (specific objective, development objective)
- How will the stakeholders get there? (outputs, activities, inputs)
- How will they know they have got there? (measurable indicators)
- What will provide the evidence they have reached there? (means of verification)
- What are the potential obstacles along the way? (key assumptions)
- What kinds of decisions or actions (beyond the control of the project) must be taken before the inception of the project? (preconditions).

Logical Framework



The order in which LFM should be completed

Intervention strategy	Indicators	Means of Verification	Assumption
Goal	Impact indicators	Sources of information	Assumption
Purpose	Outcome indicators	Sources of information	Assumption
Outputs	Output indicators	Sources of information	Assumption
Activities	Means	Sources of information	Assumption
			Pre - conditions

LFW-

1. GOAL	1. INDICATORS	1. ASSUMPTIONS
The higher-level objective towards which the project is expected to contribute (Mention target groups)	Measures (direct or indirect) to verify to what extent the goal is fulfilled (Means of verification should be specified)	Important events, conditions or decisions necessary for sustaining objectives in the long run

2. PURPOSE	2. INDICATORS	2. ASSUMPTIONS
The effect which is expected to be achieved as the result of the project (Mention targetgroups)	Measures (direct or indirect) to verify to what extent the purpose is fulfilled (Means of verification should be specified)	Important events, conditions or decisions outside the control of the pro-ject which must prevail for the development objective to be attained

LFW-

3. OUTPUTS	3. INDICATORS	3. ASSUMPTIONS
The results that the project management should be able to guarantee	Measures (direct or indirect) which verify to what extent the outputs are prouced	Important events conditions or decisions outside the control of the project management, necessary for the achievement of the immediate objective
(Mention target groups)	(Means of verification should be specified)	

4. ACTIVITIES	5. INPUTS	4. ASSUMPTIONS
The activities that have to be undertaken by the project in order to produce the outputs	Goods and services necessary to undertake the activities	Important events, conditions or decisions outside the control of the project management necessary for the production of the outputs

LFW-

Ensure that

- The indicators of the specific objective will measure the desired changes or outcomes.
- The indicators for development objective, specific objective and outputs are SMART. Specific, Measureable Actionable, Relevant & Time-framed
- The ‘means of verification’ column identifies the source of information needed to verify each indicator.
- The assumptions are clearly spelled out and no assumptions at the output and activity levels are likely to be ‘killer’ assumptions.

Goal & impact indicators

- The development objective is the broader or higher-level objective to which the project – along with other projects and initiatives – will contribute
- Can be derived from the top-level problem of the problem tree by converting it into a positive statement.
- Goal needs to be clearly defined and used as a main point of reference by all involved parties during project implementation.
- This will provide a point of reference to measure the achievements.

Goal

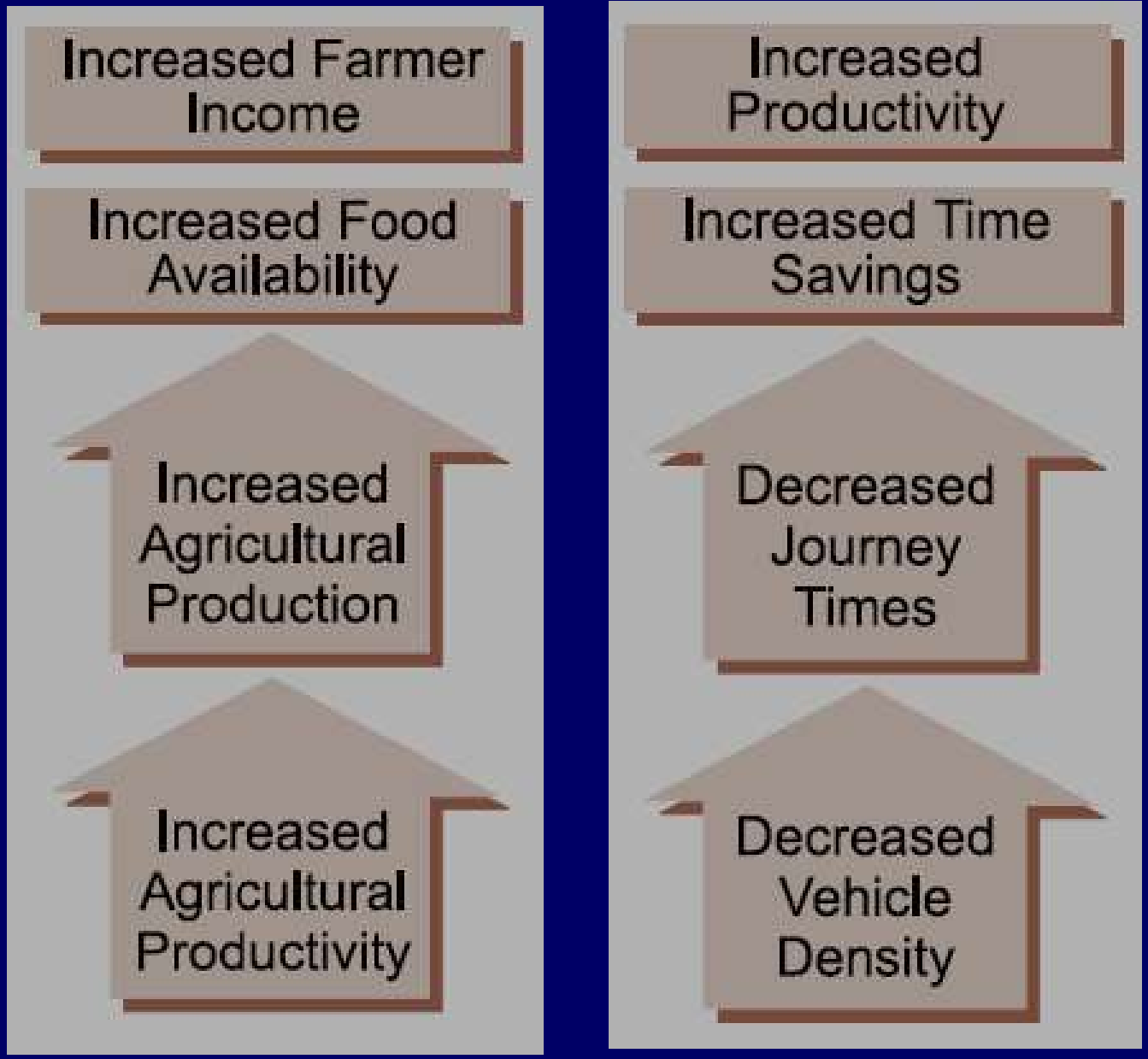
- A common problem in project design is that the goal is too ambitious or not clearly defined, e.g.:
  - Poverty in rural areas reduced
  - Physical environment improved
  - Overall standard of living improved
- There is a tendency to use broad, very ambitious goals in order to provide a solid justification for the project. However, a narrow, specific goal should be chosen. This will increase the probability of success.

Goal

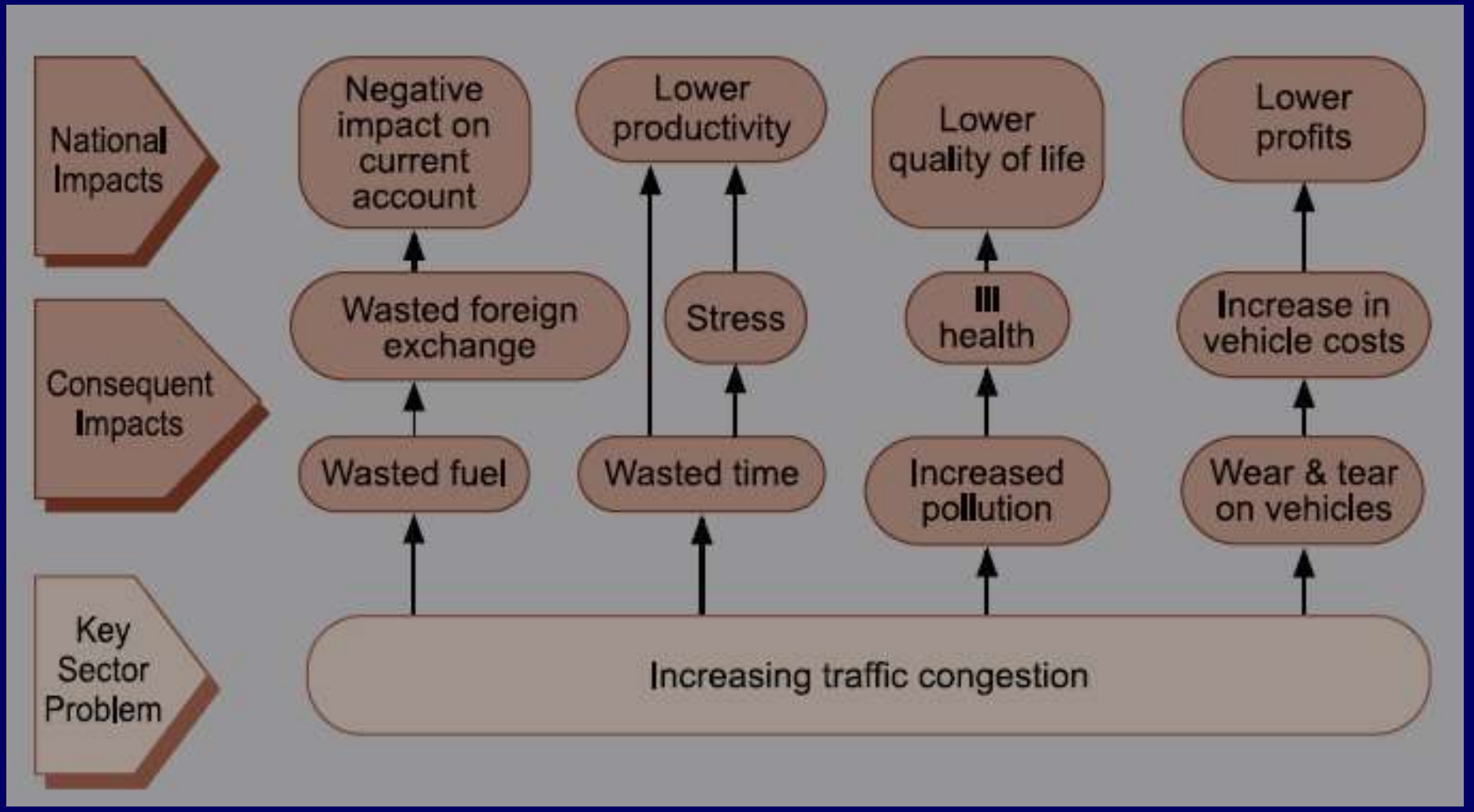
ONCE THE GOAL HAS BEEN FORMU-LATED, ENSURE THAT:

1. It is consistent with the development policy of the **partner country**
2. It is consistent with the **donor's** policy guidelines for development aid
3. It represents a **sufficient justification** for the project
4. It is **not too ambitious.** (i.e. achieving the purpose will significantly contribute to the fulfilment of the goal)
5. The **target groups** are explicitly defined
6. It is expressed as a **desired end,** not as a means (a process)
7. It is expressed in **verifiable** terms
8. It does not contain two or more objectives which are causally linked (means-ends)

Impact Hierarchy

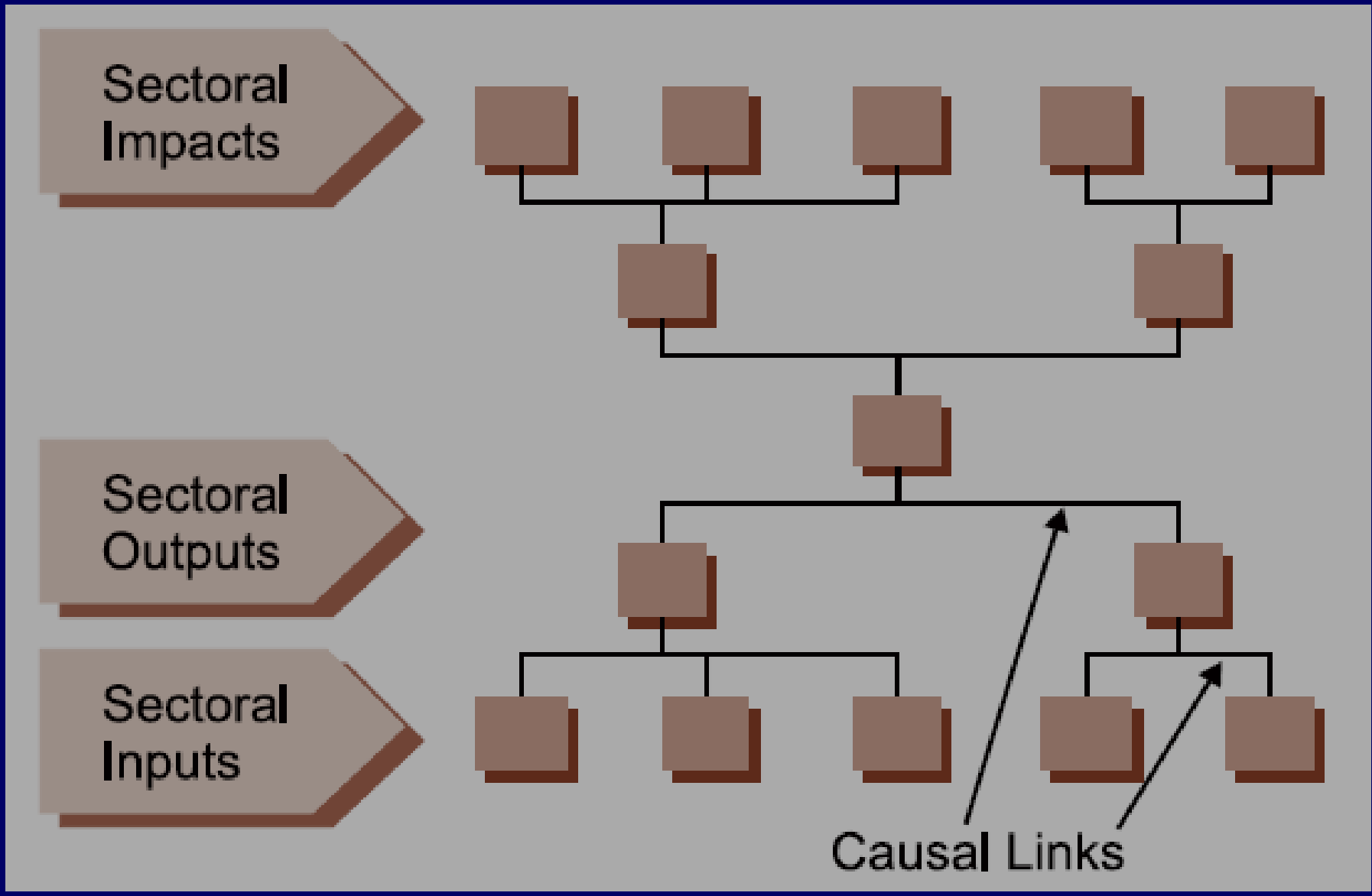


Hierarchy of impacts in transport sector

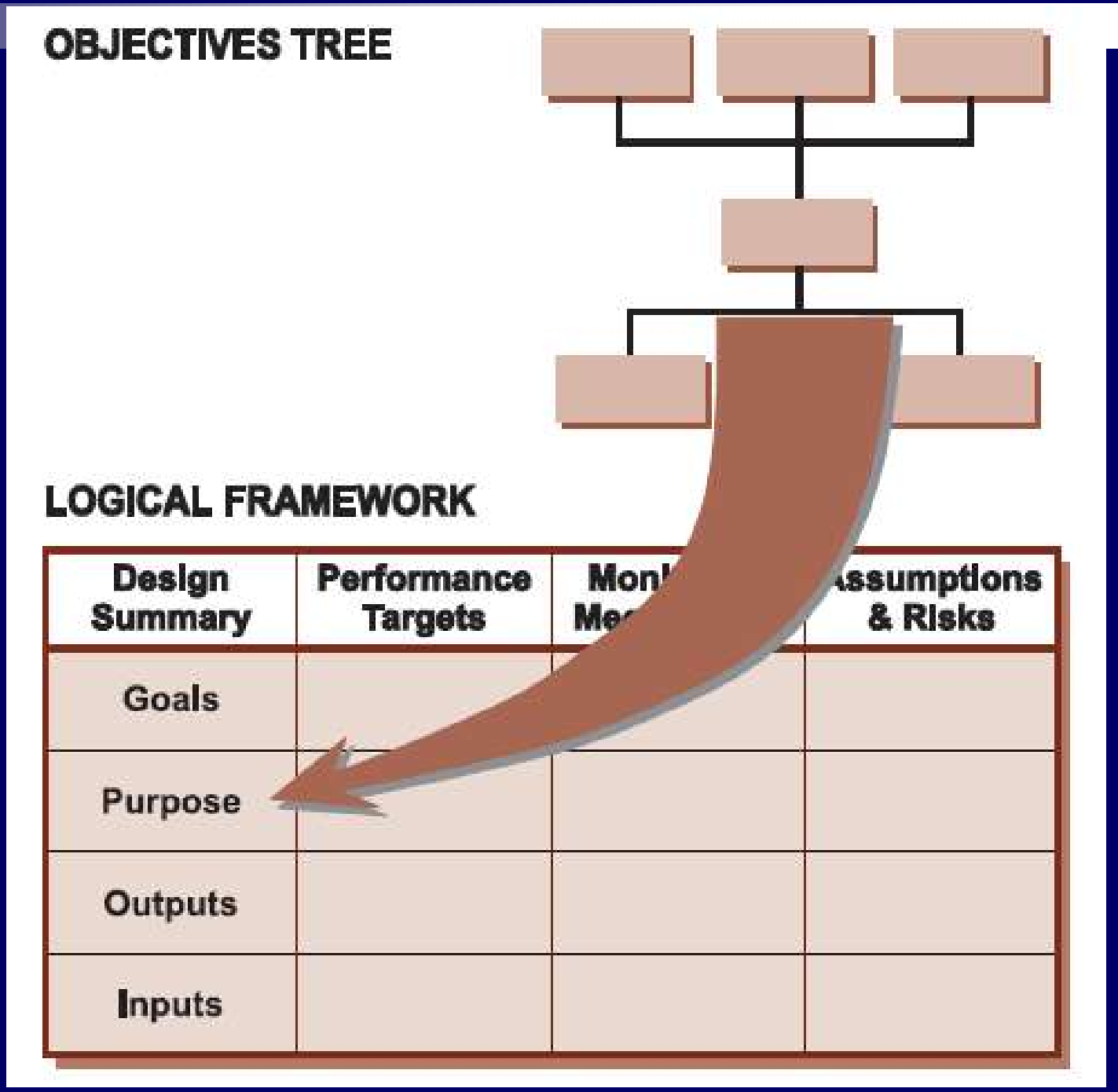


Typical sector outputs & impacts

Cause-Effect linkage



Formulating the project purpose



Formulating the project purpose

Design Summary	Performance Targets	Monitoring Mechanisms	Assumptions & Risks
Goals			
Purpose			
• Reduced traffic congestion	• Increased traffic speed on major arteries from 12km/hr to 25km/hr in 3 years	• Daily reports from traffic monitoring system	
Outputs			

Formulating goals

Design Summary	Performance Targets	Monitoring Mechanisms	Assumptions & Risks
Goals			
• Saved travel time • Reduced pollution • Fuel conserved	• Average journey time to work reduced from current 1 hour • TSP, PM10, Lead levels within WHO guidelines • Improved fuel consumption/ km	• Quarterly sample survey • Quarterly field surveys • Motor association surveys	
Purpose			
• Reduced traffic congestion	• Increased traffic speed on major arteries from 12km/hr to 25km/hr in 3 years	• Daily reports from traffic monitoring system	
Outputs			

PROJECT DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets/ Indicators	Data Sources/Monitoring Mechanisms	Assumptions and Risks
Impact Skilled and highly skilled human resources developed to contribute to economic growth and social development	• Graduation of technicians increased from about 600 technicians annually to about 2,200 • About 1,000 technologists within the NVQ framework graduate annually • Employment rate of CoT technician graduates increased by 30% over 2002 rate of certificate graduates • Females comprise at least 20% of CoTs enrollees • Females comprise at least 20% of Univotec enrollees	• Project completion report • MVTT EMIS data • MoE data	**Assumptions** • Political and socioeconomic conditions remain stable • Economy continues to create jobs and to require new and higher level skills • Government allocates sufficient budget to the TEVT sector

Technical Education Development Project

TED Project

Outcome Improved access and strengthened capacity of the TEVT system in technical and technological education to address labor market needs	• Six TCs strengthened to enable them to become CoTs • 10 technician diploma programs in different technologies that do not require A/L qualifications for admission developed • Annual enrollment intake capacity of technician diploma programs increased from 600 to 1,500 full-time and 1,500 part-time students • Univotec established • Two degree programs (B.Tech.Ed and B.Tech.) that do not require A/L qualifications for admissions developed • Technical teacher education (B.Tech.Ed.) institutionalized with annual enrollment intake capacity of 300 full-time and 300 part-time students • Annual enrollment intake capacity of 600 full-time and 600 part-time students in technologist programs (B.Tech.) developed • 100 TEVT teachers and trainers strengthened	• Project completion report • MVTT EMIS data • MoE data	**Assumption** • MVTT is effective in leading the TEVT sector and a market-responsive TEVT system is maintained

Indicators

The achievement of the specific objective should be quantitatively or qualitatively verifiable. A well formulated specific objective identifies directly or implicitly WHO will be reached, WHAT change will occur, in WHAT time period and WHERE the change will take place. It should be SMART:

- Specific: to avoid differing interpretations
- Measurable: to allow the monitoring and evaluation of implementation
- Appropriate: to adequately address the problems
- Realistic: achievable and meaningful
- Time-bound: with a specific time for achieving it.

Indicators

Five Steps to Develop Good Indicators

Project objective: Reduce the rate of acute infections in the community

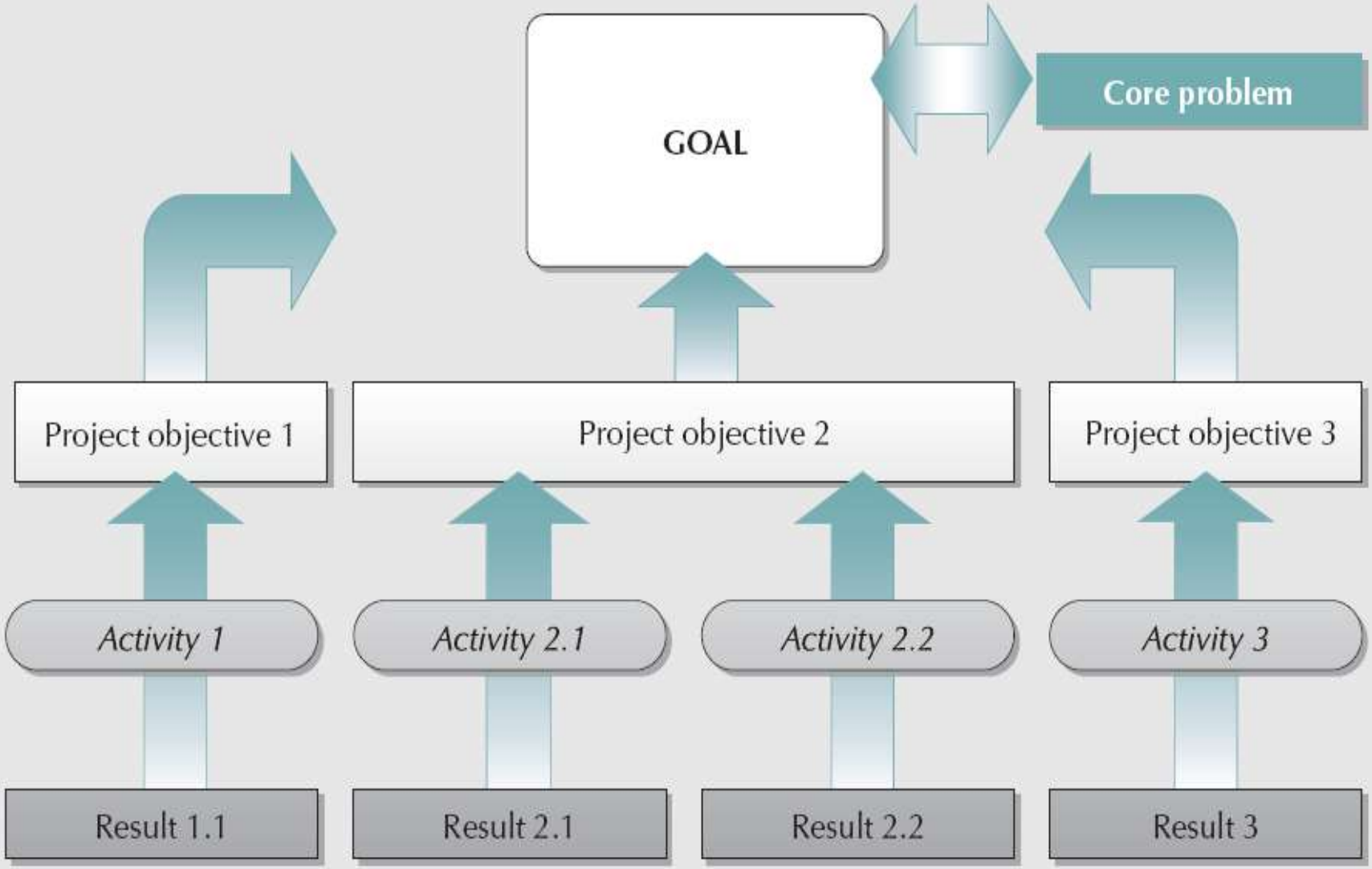
- Quality (the nature of the indicator): **Infection rates reduced;**
- Target Group (Who?): Infection rates reduced among **school children**;
- Place (Where?): infection rates reduced among children of **Village Z**;
- Quantity (How Much?): infection rates reduced among children of Village Z **by 45 percent**;
- Time: infection rates among children of Village Z reduced by 45 percent **by 2004.**

Indicators

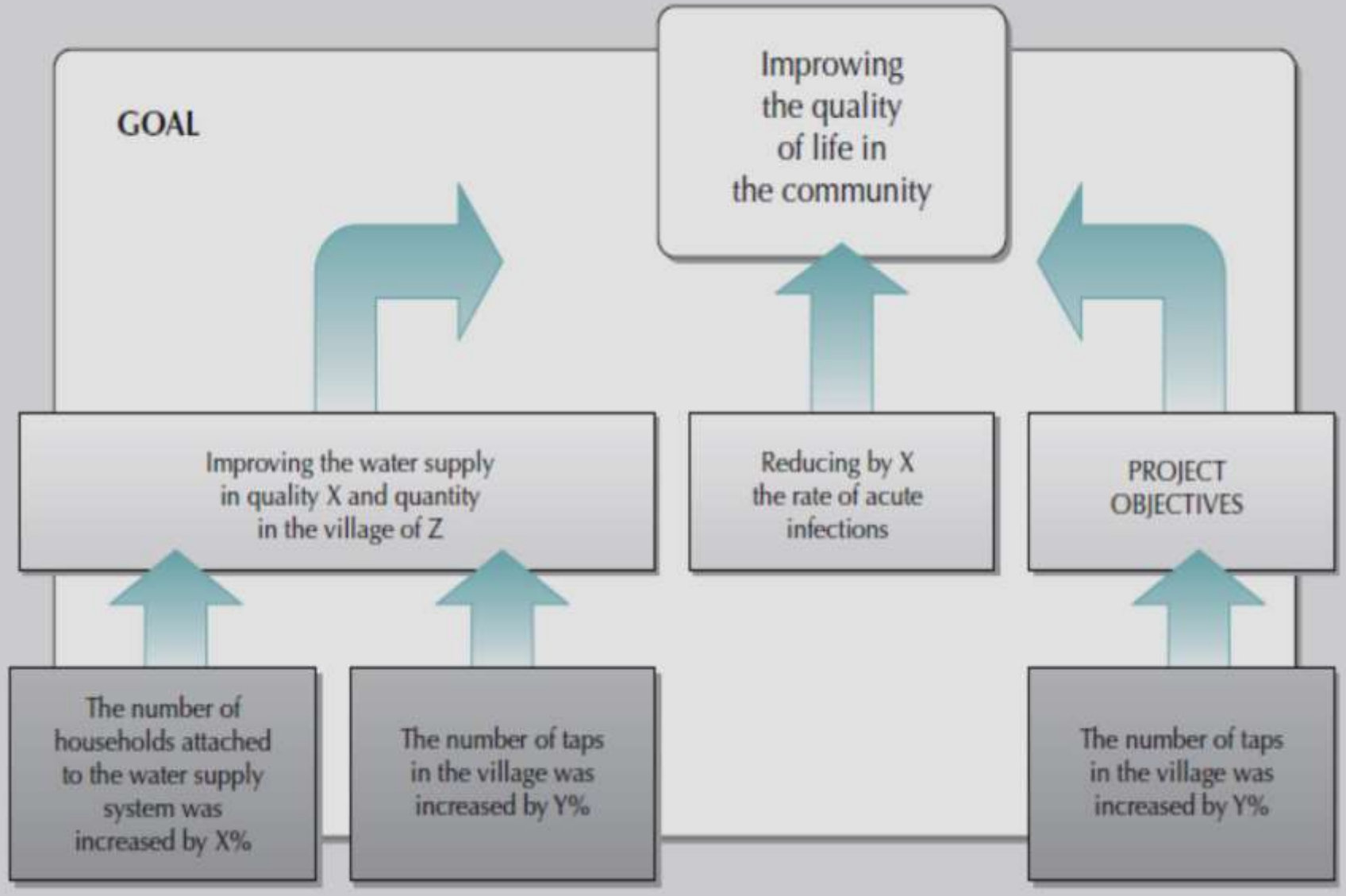
A good indicator is:

- **Substantial**, i. e. it reflects an essential aspect of an objective in precise terms.
- **Independent**, at the different levels. Since development and immediate objectives will be different, and each indicator is expected to reflect evidence of achievement, the same indicator cannot normally be used for more than one objective.
- **Factual**. Each indicator should reflect fact rather than subjective impression. It should have the same meaning for project supporters and to informed sceptics.
- **Plausible**, i. e. the changes recorded can be directly attributed to the project.
- Based on **obtainable** data. Indicators should draw upon data that is readily available or that can be collected with reasonable extra effort as part of the administration of the project.

Hierarchy of Goal, Objectives, Results and Activities



Hierarchy of Objectives with Sample Goal, Project Objectives and Results



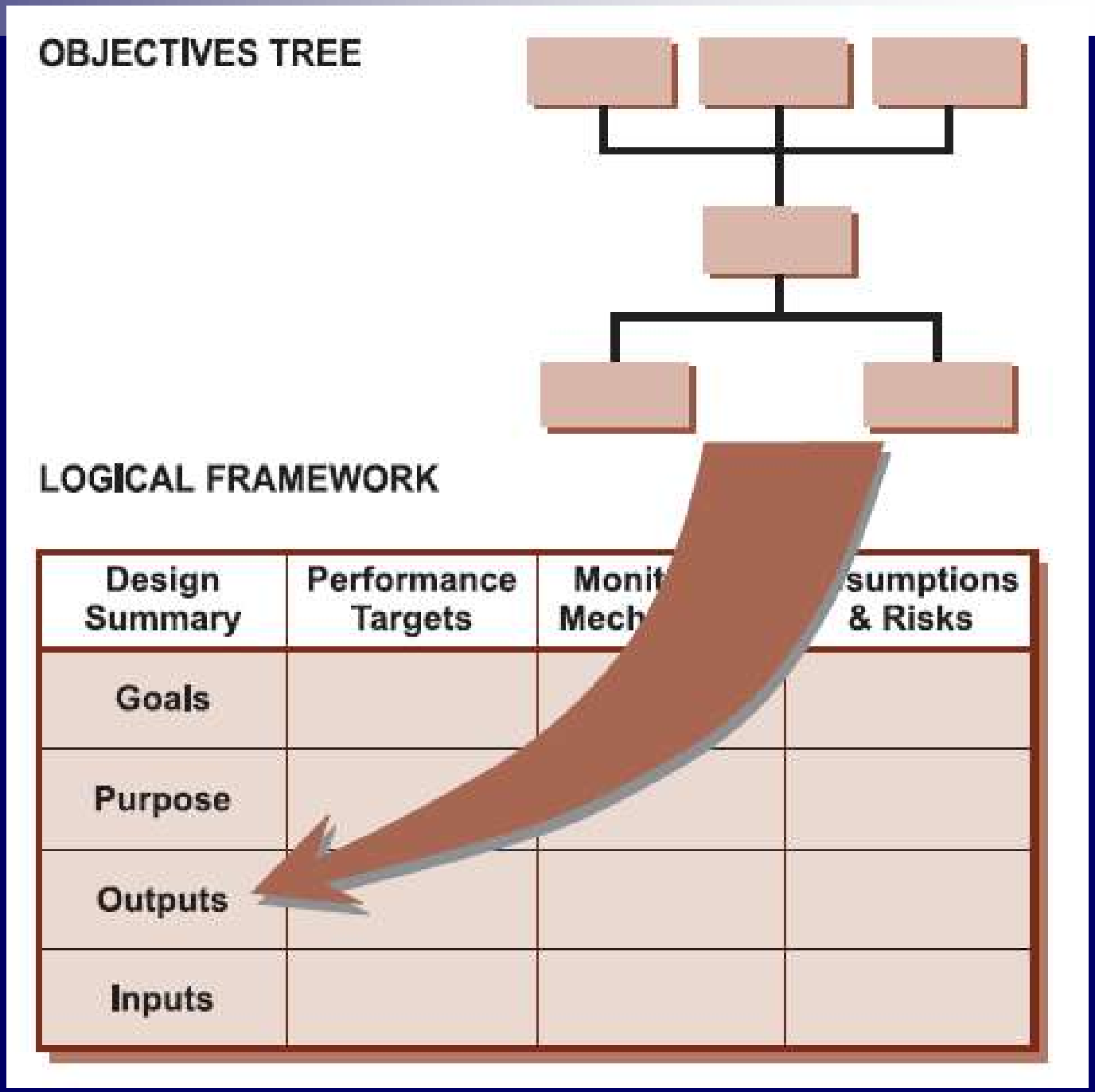
Important…..

- Objectives must be clearly stated, exhaustively defined, broken down to sub goals & targets
- Describe how project specific objectives stand out among sectoral/ national objectives
- Projects should be viable in long term
- Impact on other projects (Negative/ Positive)
- Will it be a priority project (limited resources, conflicting policies/ strategies, and divergent interests necessitate some kind of ranking among projects)

Project Interventions

- Outputs and activities
  - Outputs
  - Activities
- Implementation approaches and methods
- Work plan
- Budget
  - Total budget by component
  - Phased budget by component & by sources
- Assumptions, risks and sustainability
  - Assumptions and risks
  - Sustainability

Outputs


OBJECTIVES TREE
LOGICAL FRAMEWORK
Design Summary
Performance Targets
Monit Mech
sumptions & Risks
Goals
Purpose
Outputs
Inputs

Outputs

The statement of outputs should:

- outline the finished or completed results in qualitative and quantitative terms
- be written in the present continuous tense (eg *50 trained people are using their acquired skills) or* the present perfect tense (eg *research results have been published) in order to indicate the expected* situation at project completion
- be as clear and definite as possible so as to leave no qualitative or quantitative uncertainty about what will be achieved
- be time-bound.

(The results of support activities, such as setting up a project office, and routine tasks carried out by the executing agency such as the recruitment of the project staff are not considered to be outputs).

TED Project

Outputs 1. Capacity of selected public sector TEVT institutions strengthened to offer technician diploma programs	• School management systems and procedures developed and installed • 24 nonacademic and administrative personnel trained in these systems and procedures • Advisory councils of CoTs established • Up to 18 CoTs officials strengthened in strategic planning and entrepreneurial management	• Baseline data • Quarterly progress reports • Review missions • Midterm review • Field visits • EMIS • Tracer studies • Project completion reports	**Assumptions** • Government supports the establishment of CoTs that are accountable and have some authority for revenue generation, spending, and selection of course offerings • Some decisions are
	• Institutional development and strategic plan developed • 12 curricula developed for the technician program • 8 sectoral curriculum councils established • 15 CoT staff trained in curriculum implementation • 30 non-CoT staff trained in curriculum implementation • Manual of student selection procedures and standards developed • Aptitude test for technicians developed • 3 technician education bridging programs developed • 12 part-time program modules developed	• Copies of manuals, and curriculum and programs documents	decentralized to CoTs • Active participation by the private sector in the Councils • Timely appointment of qualified and dynamic heads • Leaders of institutions think strategically and innovatively. • Qualified instructors are available • Staff trained and committed to contribute to CoT development

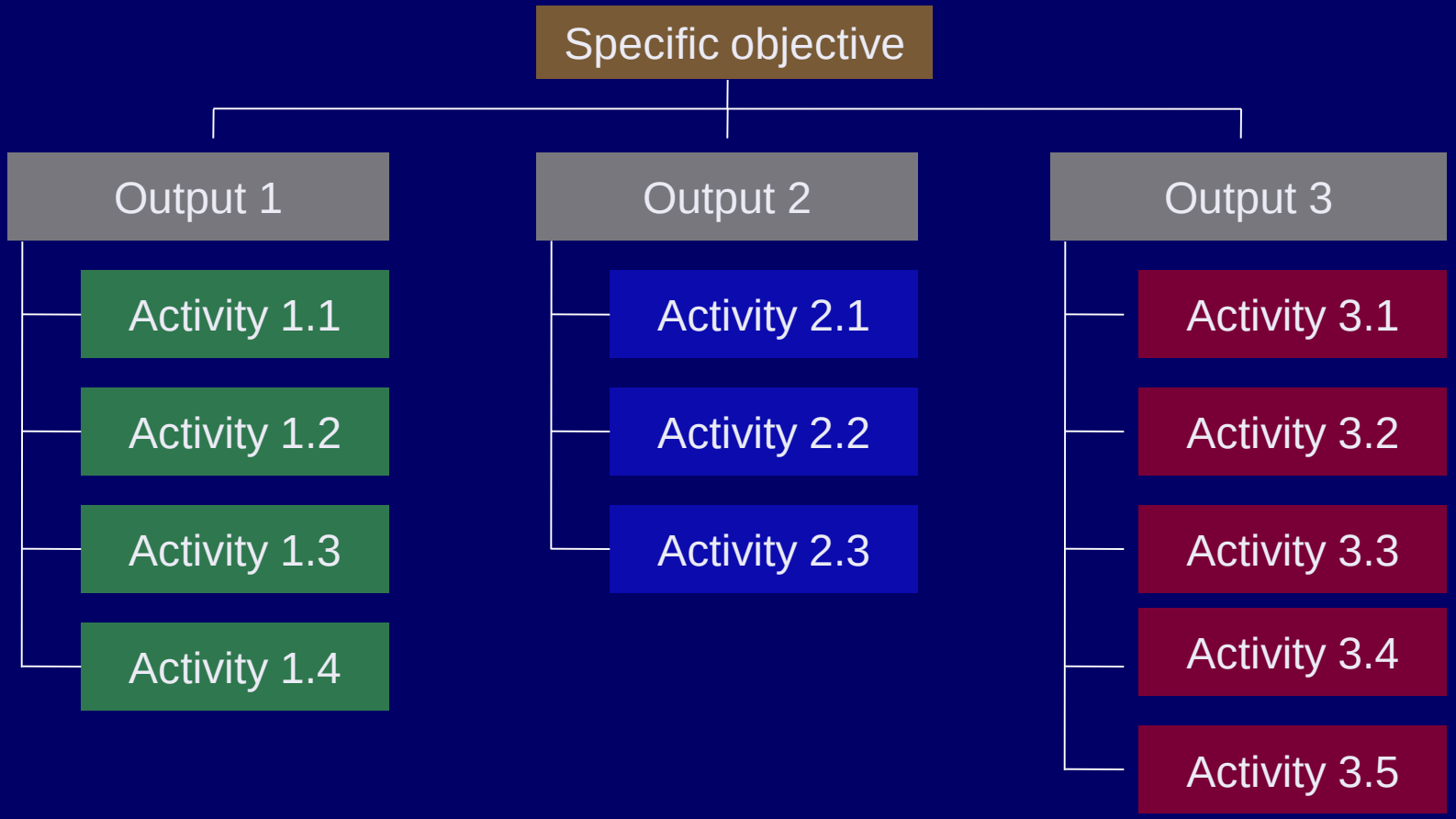
Outputs

Output	Indicator
• Forest management plan developed and implemented	▪ By the end of the 1st year, zoning has been completed ▪ By the end of the 1st year, the executing agency has strengthened capacity to support technological changes in forest uses and to monitor management plans ▪ By the end of the 2nd year, the executing agency has adopted a management plan ▪ In the 3rd year, the management plan is put into implementation.

Identification of project interventions

Activities

A good tool for establishing activities is the work breakdown structure, which identifies groups of activities related to each project output and presents them in a hierarchical structure. It is usually constructed as a simple block diagram showing each of the project's outputs and the related set of activities that will allow their achievement



Preparing an activity plan		
Step	Activity	Considerations
1	List all project activities	Develop a single list of all activities planned.
2	Break activities into manageable tasks and sub-activities	Break activities first into sub-activities and then into tasks. Each task is assigned to an individual who assumes it as a short-term goal. The main consideration is getting the level of detail right. The most common mistake is to break activities into too many details. Planners should stop breaking the activities down any further as soon as they have sufficient detail to estimate the resources required.
3	Clarify sequence and dependence	Relate activates to each other in order to determine their sequence and dependence. Is the activity dependent on the start-up or completion of any other activity? For example, building a house consists of a number of separate, but inter-related actions: first comes digging and laying the foundation, then the walls are erected, etc.

Preparing an activity plan

Step	Activity	Considerations
4	Draw up a timeline for each task	Each task should be given a start-up date, a duration and a completion date. The schedule should then be followed as closely as possible.
5	Summarise the scheduling of main activities	Having specified the timing of the individual tasks, the next step is to plan (summarise) the timing of the entire main activity.
6	Use milestones	Milestones are key events that provide a measure of project progress and targets for the project team to aim for.
7	Define expertise	The level and type of expertise needed should be decided for each task separately.
8	Allocate tasks among the team	Distribute responsibilities in consultation with the members of the team.

Work plan

- The work plan is presented as a Gantt chart, which is a bar chart that plots the duration of project activities; black horizontal bars show when the activity starts and ends.
- For projects that have a planned duration of more than two years, quarterly rather than monthly divisions of time may be used.
- The starting quarter of the first activities and the ending quarter of the last activities determine the total duration of the project.

Action Plan

Output	Activity	Resources	Time frame								Responsibility
			2007				2008				
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Output 1	Activity 1.1										Mr. A
	Activity 1.2										
Output 2	Activity 2.1										Ms. B
	Activity 2.2										

Project that is not closed will continue to consume resources. It is in the customer's interest to keep the project open so they can add new features and functionality as they think of them.

Action Plan

Activity Plan in a Table

ACTIVITIES/TASKS		IMPLEMENTATION TIME			RESPONSIBILITY
		Start	End	Note	
No.	**Result: More stakeholders involved in the environmental planning board**				
	Activity I. Project kick-off campaign				PIT
1.1	**Preparation of activity leaflets**	June 5, 2000	Jun 25, 2000		Graphic designer
1.2	**Distribution of leaflets**			By July 15	PIT
1.3	**Meetings with community groups**	July 10, 2000	July 25, 2000	By July 15	PC
3.	**Initial EPB meeting**			By Aug. 15	

PIT = Project Implementation Team; PC= Project Coordinator

Action Plan

A Gantt Chart

ACTIVITY	Month 1	Month 2	Month 3	PA	TA
Result 1: Quality of project management improved					
Activity 1.1: Design and implementation training programme for project management	XXXXX				L L
1.1.1 Conduct needs assessment		XXXXX		L	
1.1.2 Design training modules			XXXXX		
1.1.3 Conduct training					L
Activity 1.2: Improve procedures for project management	XXXXX	XXXXX	XXXXX	L	
1.2.1 Conduct management audit of current procedures		XXXXX		L	
1.3.1. Design and test new procedure			XXXXX		L

PA = Programme adviser; TA= Technical adviser; L- Lead role

Budget

The next step is to identify the inputs – human resources, equipment, facilities, expendables, spare parts, financial resources, time, etc – required to carry out each activity.

- Since the project budget will be derived directly from these inputs, their type, quality, quantity and unit cost should be clearly indicated for each activity in the master budget table.
- The degree of detail in the inputs should make it possible to draw up an accurate and transparent budget.
- Details
  - Total budget of the project
  - Detailed budget by activities and cost types
  - Rate and form of own contribution
  - Potential funders and sources of income

Expenditure Projections

Description	Amount				
	yr1	yr2	yr3	yr4	Total
Recurrent Financing 1. Salaries 2. Fuel 3.					
Capital Financing 1. 2. 3.					
Total					

Funding Sources

Description	Amount				
	yr1	yr2	yr3	yr4	Total
Financing Sources 1. Central Government 2. Provincial Government 3. NGOs 4. Other					
Total					

Project cost

	(SLRe Million)			(US$ Million)			% Foreign Exchange	% Total Base Costs
	Local	Foreign	Total	Local	Foreign	Total		
I. Investment Costs								
A. Civil Works	2,902.0	152.7	3,054.7	26.4	1.4	27.8	5	31
B. Furniture	413.2	136.3	549.5	3.8	1.2	5.0	25	6
C. Equipment	1,851.9	610.7	2,462.6	16.8	5.6	22.4	25	25
D. Vehicles	12.4	12.3	24.6	0.1	0.1	0.2	50	-
E. Instructional Material	411.2	21.6	432.9	3.7	0.2	3.9	5	4
F. Foreign Training	-	234.5	234.5	-	2.1	2.1	100	2
G. Local Training	963.8	-	963.8	8.8	-	8.8	-	10
H. International Consultancy	-	233.9	233.9	-	2.1	2.1	100	2
I. Domestic Consultancy	101.6	-	101.6	0.9	-	0.9	-	1
J. Campaign, M&E, Auditing	70.0	-	70.0	0.6	-	0.6	-	1
K. Special Program FIIL	715.0	-	715.0	6.5	-	6.5	-	7
L. Student Scholarship	330.0	-	330.0	3.0	-	3.0	-	3
Total Investment Costs	7,771.1	1,402.0	9,173.0	70.6	12.7	83.4	15	93
II. Recurrent Costs								
A. Incremental Staff	159.7	-	159.7	1.5	-	1.5	-	2
B. Administration Support & O&M	537.0	-	537.0	4.9	-	4.9	-	5
Total Recurrent Costs	696.7	-	696.7	6.3	-	6.3	-	7
Total BASELINE COSTS	8,467.8	1,402.0	9,869.8	77.0	12.7	89.7	14	100
Physical Contingencies	568.5	77.7	646.2	5.2	0.7	5.9	12	7
Price Contingencies	2,111.8	303.5	2,415.3	1.8	0.3	2.1	13	2
Total PROJECT COSTS	11,148.1	1,783.2	12,931.3	84.0	13.7	97.7	14	109
Interest During Implementation	-	284.7	284.7	-	2.3	2.3	100	3
Total Costs to be Financed	11,148.1	2,067.9	13,215.9	84.0	16.0	100.0	16	111

Financing methods

($ million)

	Asian Development Bank		Government of Sri Lanka		Total		For. Exch.	Local (Excl. Taxes)	Duties & Taxes
	Amount	%	Amount	%	Amount	%			
I. Investment Costs									
A. Civil Works	16.0	51.2	15.2	48.8	31.2	31.2	1.6	27.1	2.5
B. Furniture	4.6	85.0	0.8	15.0	5.4	5.4	1.3	3.2	0.8
C. Equipment	20.4	85.0	3.6	15.0	24.0	24.0	6.0	14.5	3.6
D. Vehicles	0.2	75.0	0.1	25.0	0.2	0.2	0.1	0.1	0.1
E. Instructional Material	4.2	100.0	-	-	4.2	4.2	0.2	4.0	-
F. Foreign Training	2.3	100.0	-	-	2.3	2.3	2.3	-	-
G. Local Training	9.4	100.0	-	-	9.4	9.4	-	9.4	-
H. International Consultancy	2.3	100.0	-	-	2.3	2.3	2.3	-	-
I. Domestic Consultancy	1.0	100.0	-	-	1.0	1.0	-	1.0	-
J. Campaign, M&E, Auditing	0.7	100.0	-	-	0.7	0.7	-	0.7	-
K. Special Program FIIL	6.9	100.0	-	-	6.9	7.0	-	6.9	-
L. Student Scholarship	3.2	100.0	-	-	3.2	3.2	-	3.2	-
Total Investment Costs	71.2	78.3	19.7	21.7	90.9	90.9	13.7	70.2	7.0
II. Recurrent Costs									
A. Incremental Staff	1.6	100.0	-	-	1.6	1.6	-	1.6	-
B. Administration Support & O&M	-	-	5.3	100.0	5.3	5.3	-	4.6	0.6
Total Recurrent Costs	1.6	23.0	5.3	77.0	6.8	6.8	-	6.2	0.6
Total PROJECT COSTS	72.7	74.4	25.0	25.6	97.7	97.7	13.7	76.4	7.6
Interest During Implementation	2.3	100.0	-	-	2.3	2.3	-	-	-
Total Disbursement	75.0	75.0	25.0	25.0	100.0	100.0	13.7	76.4	7.6

Resource Plan

A Resource Plan for Activity 1.1

ACTIVITIES/RESOURCES	Unit	Quantity per period				Cost per unit	Funding source	Cost per period				Total costs
		Q1	Q2	Q3	Q4			Q1	Q2	Q3	Q4	
1. Design and implement training programme												
Equipment:												
Computer	No.	2				1,000	EU	2,000				2,000
Photocopier	No.	1				5,000	EU	5,000				5,000
Printer	No.	2				500	EU	1,000				1,000
Salaries and Allowances												
Counterpart staff	Nm	6	6	6	6	1,700	CT	10,200	10,200	10,200	10,200	40,800
Office staff	Nm	3	3	3	3	900	G	2,700	2,700	2,700	2,700	10,800

Understanding the Budget Estimate

POLICY

PROGRAMME

PROJECT

OBJECT CODE

Finance Code

HEAD - 111 Minister of Health Care and Nutrition
02 - Development Activities
12 - Relief and Reconstruction in Tsunami Affected Area

Rs '000

Project	Sub Project	Object	Item	Finance Code	Category / Object / Item Description	2005 Actual	2006 Estimate	2006 Revised Estimate	2007 Estimate	2008 Projections	2009	2006 -2009 Total
12					Recurrent Expenditure	4,663						
	3				Tsunami Emergency Activities	4,663						
					Services	4,663						
		1405			Other	4,663						
12					Capital Expenditure	238,911	400,000	400,605	700,000	600,000		1,700,605
	1				Tsunami Emergency Recovery II Emergency Health Supply and Rehabilitation (World Bank)		300,000	300,000	400,000	100,000		800,000
					Acquisition of Capital Assets		300,000	300,000	400,000	100,000		800,000
		2103	13		Plant, Machinery and Equipment		300,000	300,000	400,000			
	2				Provide of Emergency and Medium Term Health and Nutrition Requirements (UNICEF)		100,000	100,000	300,000	500,000		900,000
					Acquisition of Capital Assets		100,000	100,000	300,000	500,000		900,000
		2103	15		Plant, Machinery and Equipment		100,000	100,000	300,000			
	3				Tsunami Emergency Activities	238,911		605				605
					Acquisition of Capital Assets	238,911		605				605
		2103	17		Plant, Machinery and Equipment	238,911		605				
12					Total Expenditure	243,574	400,000	400,605	700,000	600,000		1,700,605
Total Financing						243,574	400,000	400,605	700,000	600,000		1,700,605
		Domestic				243,574		605				605
			11		Domestic Fund	4,663						
			17		Foreign Aid Related Domestic Funds	238,911		605				
		Foreign					400,000	400,000	700,000	600,000		1,700,000
			13		Foreign Aid Grants		300,000	300,000	400,000			
			15		Reimbursable Foreign Aid Grants		100,000	100,000	300,000			

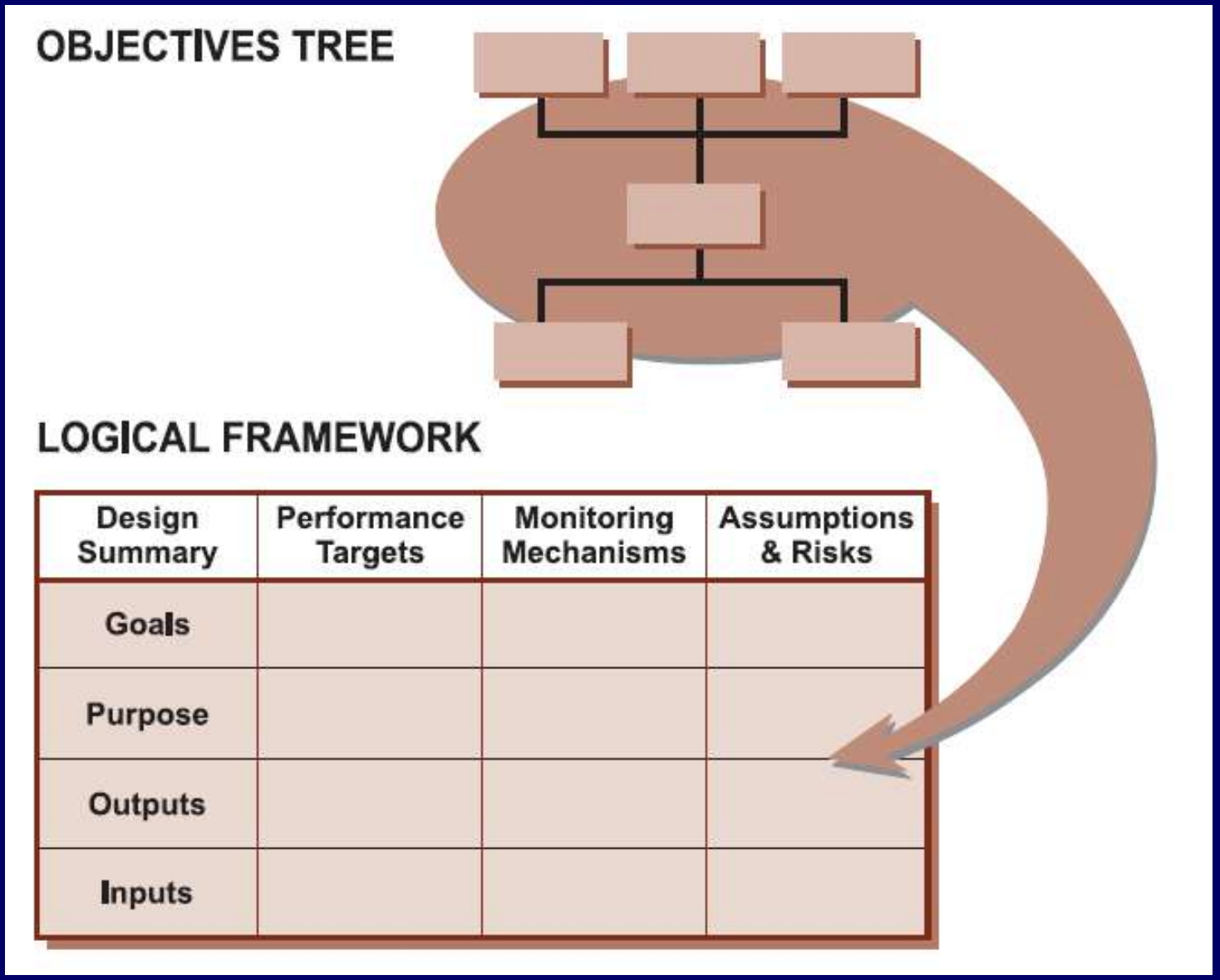
Project Assumptions, Risks & Sustainability

Assumptions

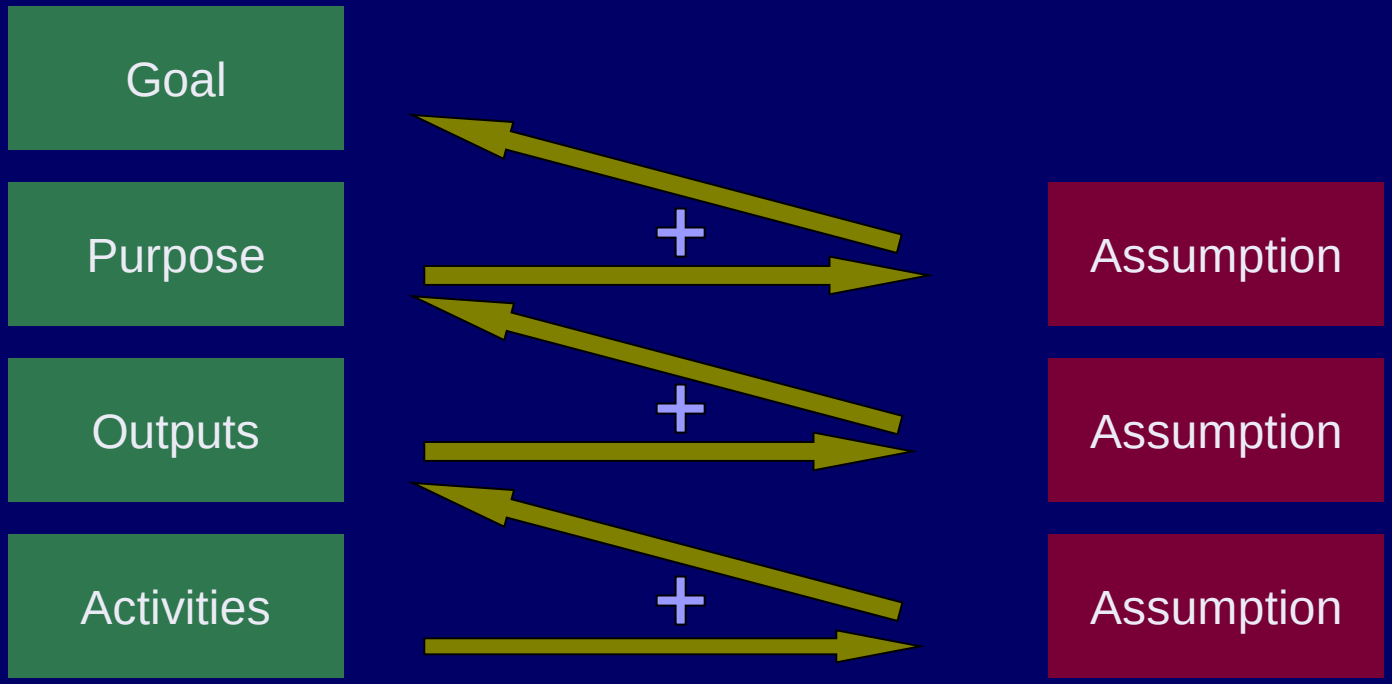
- The success of a project depends upon a number of factors that can be controlled by the project management, as well as upon a number of external assumptions.

- During planning and implementation it is extremely important to identify, monitor and analyze external assumptions, since they may cause the project to fail even if it is implemented as planned.

Assumptions



Assumptions



Assumptions

Assumptions are very important in the chain of project results. When an important assumption does not valid, the chain breaks. Assumptions might reflect:

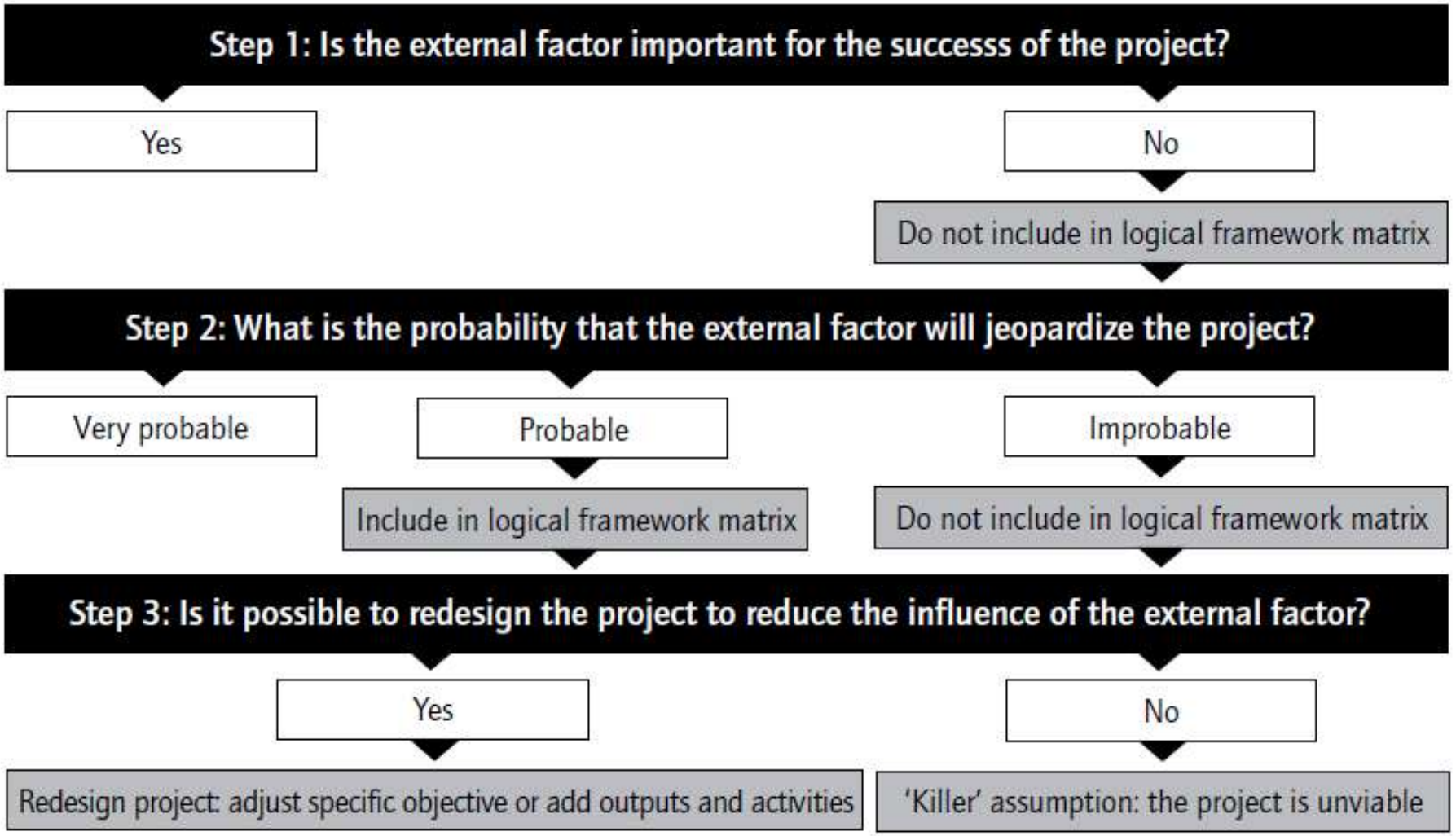
- Unpredictable natural conditions, such as for successful plantation establishment: *There will be sufficient rainfall at the time of seedling establishment.*
- Unpredictable socio-political upheavals, such as those required before a project can start: *the negotiations to end the war will be successfully concluded by the end of 2009. This is a 'killer' assumption* because the project will not start if the conflict does not end.
- Favourable situations and factors needed for success, such as for a project on timber export promotion: *timber prices on the international market will remain stable.*

Assumptions

Typical areas in which assumptions influence the outcomes of projects include:

- market conditions/prices
- macroeconomic policies/conditions
- political and social conditions
- sector policies and conditions
- environmental conditions
- private sector capability
- government administrative capability
- community/NGO support
- counterpart funding.

Decision tree for analyzing External assumptions



Risk Matrix

A: Criticality/Importance
R: Likelihood

High	Monitor-consider Mitigating	Mitigate - Prepare Plan	Killer: Rethink Project
Medium	Monitor	Monitor-consider Mitigating	Mitigate - Prepare Plan
Low	Ignore	Monitor	Monitor-consider Mitigating
	Low	Medium	High

A: Probability of Failure
R: Expected Impact

Project Appraisal at the Center

Thank You